Systematic Analysis

Methodological Perspectives

Ari J. Tervashonka (ed.)

Systematic Analysis

Methodological Perspectives

Finnish Methodology Society
Metodologia Series
Finland

First edition published 2024

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Cover design Biayna Aghababyan

ISBN 978-952-65431-4-7 (softcover)
ISBN 978-952-65431-5-4 (PDF)

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Foreword

The following selection of writings on the systematic analysis method has been influenced in various ways by the heritage of methodological maestro Seppo Antero Teinonen (1924–1995). This scientific theoretical framework formalises the fundamental culture for these writings. From the seminars of Teinonen to the first generation of his pupils and beyond, these papers have developed more systematically than many others.

Nevertheless, to a large extent, different perspectives and developments have been conveyed by these writings in form of method guidelines and theory or practical articles. The major benefit of this book is that it presents a collection of views on this method from different areas of science, education, philosophy, history, theology and systematic theology, systems science, and information and documentation research.

The book illuminates the intertwined reasonings of interdisciplinary efforts towards systematic methodology and, to a great extent, development ideas grounded in a similar background, despite differences in areas of science. This holistic effort can be seen for the most part in the vast number of fields of studies that have used and benefitted from these papers. Who would have known that papers from theology and education would be used in the next 20 years for the benefit of systems science and other scientific research in different areas that profit from qualitative systematic approaches? This provides a fine example of the successful interdisciplinary measures employed to seek means and tools without limitations in the field of science. However, systematic analysis has larger potential, although this has not yet been implemented or understood enough for wider use in science. There are multiple

reasons for this, one being the fragmentation of information and lack of books on this topic that we are now slowly developing with the help of decades of improvements and ideas. Furthermore, as Juhani Jussila, Kaisu Montonen and Kari E. Nurmi have noted, the whole notion of systematic analysis has benefitted from earlier ideas and the intellectual history of systematic efforts in theory history and the history of philosophy.

Regarding these guidelines and articles, I have personally seen some of the papers and book articles in multiple libraries being read until they have literally started to fall apart. These materials have turned in yellowish paper that remind reader of much used babyrus. This is the testament to long life and a large readership, and the particular need for these approaches can be seen from their material conditions. Nevertheless, time has performed its deeds, and a substantial number of these materials are more difficult to find than when they were written. Maintaining these valuable writings in circulation is equally important in giving them the possibility to exist in the global scientific domain.

Almost all these writings were originally published in Finnish and now this selection of the most commonly used and theoretically important papers have been gathered and translated to provide a much-needed overview of systematic approach guidelines. Systematic analysis is characterised, for the most part, by extremely heterogenic global and local histories along with multiple forms and method families. Therefore, despite the use of phrases such as the systematic analysis method, it can be better thought of as an assortment of systematic analysis tools or techniques, as defined earlier by Jari Jolkkonen. Notwithstanding this large variety, I later defined systematic analysis in a more generalised form so as to provide a measured assessment of its functional limitations:

> **Definition**: Analyses are conducted in a cohesive manner which logically permits the formation of a rational synthesis of the subject matter, thereby explaining it systematically.

Systematic analysis requires materials and ideas that can be employed in an equally relevant analysis to permit development of a synthesis based on the evidence of logical inquiries. This difficulty relates not to the difficulty of material but to the broad imagination and intuition required to identify and assess the scientific limitations and processes to ensure the reliability and transparency of analytical results. Analyses cannot be stacked together like layers of cake. Each must carry its argumentative weight if it is to have an equal place inside of synthesis formulation. Otherwise, a systematic analysis simply becomes a systematic literature review, or results in unsound logical structures with respect to the resulting synthesis.

Therefore, it is clear from the use of this method and its evaluation that an analysis must be performed according to all necessary procedural measures. Furthermore, it is equally important part to keep an analysis open and free until the end of synthesis creation confirms the final logical connectivity among the arguments.

As editor of this book, I am extremely grateful to every writer who permitted and supported this project, enabling me to gather together all the major interdisciplinary views on systematic analysis in Finland.

With gratitude and joy,

2024

Ari J. Tervashonka

Chapter Introductions

The following introductions provide a brief summary of the functions and basic information of each systematic analysis paper.

This book begins with an extensive article by Juhani Jussila (left), Kaisu Veijalainen[1] and Kari E. Nurmi, which includes the history, phases, logic, and qualification criteria of systematic analysis.

Third chapter is Kari E. Nurmi's Systematic Text Analysis[2], which is a focused version of an earlier book chapter on 'Systematic analysis as research method in education'. His writing operates in the general philosophy of science and practice of the method, providing not only explanations of methodological processes but also different theoretical frames for disparate forms of qualitative research.

[1] Also works under old name Kaisu Montonen.

[2] https://metodix.fi/2014/05/19/nurmi-systemaattinen-tekstianalyysi/

Jari Jolkkonen[3] has contributed immensely to this topic with his widely used method guidelines, *Systematic analysis as research method*. His guidelines focus on different variations of systematic analysis, and he addresses a large variety of different research targets. Jolkkonen used original seminar papers by Seppo A. Teinonen to construct these guidelines and to convey fragmented ideas in a more cohesive manner.

Aino Hannula has given a practical and prosedural perspective on the use of systematic analysis as an analytical methodological approach. Her writing offers a methodologically instructive case of research on Paulo Freire's pedagogics, conducted using systematic analysis. This work has become an essential pragmatic explanation that has not always been available in otherwise philosophical and theory-oriented writings on this topic.

[3] Picture of Jari Jolkkonen photographed by Tuija Hyttinen, © Kuopion ev.lut. seurakunnat Tuija Hyttinen.

Ari J. Tervashonka's writings offer views on how to conduct systematic analysis with larger varieties of source materials, including systematic analysis based on multiple corpus materials in the form of systematic analysis hermeneutic theory (SAH). The final chapter offers a philosophical meta-analysis on systematic analysis papers by different authors. This analysis provides a fundamental basis for the continuing development of systematic analysis as an interdisciplinary research method.

Vesa Suominen has developed the application of SAH-theory in the field of informatics and documentation research. His writing further broadens hermeneutic considerations that are based on his research on hermeneutics. Suominen brings SAH-theory closer to users of this theory through a pragmatic assessment of the uses and possible features in the field of informatics, documentation research, and library research (LIS). In studies in LIS, Suominen has also analysed the applicability of SAH-theory as a research tool in cases involving more heterogenic sources of interdisciplinary projects.

Juhani Jussila – Kaisu Veijalainen – Kari E. Nurmi[4]

SYSTEMATIC ANALYSIS AS A RESEARCH METHOD IN EDUCATIONAL SCIENCES

1. Philosophical Research into the Foundations of Education as an Alternative to Empirical Educational Research: Systematic Analysis

In this chapter, systematic analysis refers to research aimed at clarifying aspects related to the content of a particular theory or idea. It is not a single method, but rather a family of methods typically employed in philosophical research. The various techniques adopted by this family are implemented in the research of all human and social sciences, including educational sciences (Scriven 1988, 131–149).

Systematic analysis does not belong to any particular school of thought, but is applied equally in research representing positivist, hermeneutic, or even Marxist traditions of the philosophy of science.

[4] The article has been produced by editing each other's texts, with Juhani Jussila writing sections 3, 4.4, 4.5, and 4.9, Kaisu Veijalainen (old name Montonen) writing sections 4.6–4.8 and 5, and Kari E. Nurmi writing sections 1, 2, and 4.0–4.3. The final section, 6, has been completed by Kari E. Nurmi based on the drafts we had prepared.

Therefore, the ways in which it is applied differ. For instance, positivist research focuses on carefully delineated subproblems and often employs the technical analytical tools of set theory, logic, and linguistics. Hermeneutic and phenomenological research uses the concepts of semiotics, or the internal starting points of the material being analysed. These studies may include hypotheses explaining the author's intentions, or the material may be deconstructed to reveal hidden contradictions. In Marxist studies, analysis is always combined with ideological critique, assessing the societal consequences of the theory or idea. This chapter does not delve into these differences in emphasis but instead focuses on the general procedure of systematic analysis and its fundamental justifications.

The term 'systematic analysis' refers to two basic tasks of theoretical work: analytical and synthetic. The analytical task here alludes to the examination of an already existing starting point of thought, such as the ideas contained in a book written by a thinker or researcher. Thus, it comprises an analysis of their system of thought. Conversely, the synthetic task refers to the comprehensive creation of a new concept, idea (proposition), or structure of thought (theory, idea, plan, etc.).

Synthesis, the creation of something new, is perhaps more challenging and interesting than the analysis of previous foundations. However, there are no – and perhaps never can be –general methodological rules for this process. That said, neither does entirely original thought exist, as creating something new relies on knowledge of previous ideas: thus, there is a mutual interaction between the synthetic task and the analytical task. Independent thinking can be fostered by analysing the intellectual products of role models or dissenters, or by uncovering the comprehensive meanings hidden in language or other forms of expression.

The analysis of a text or other form of expression is considered systematic when it seeks to clarify the content, meaning, and position

of the subject being studied as part of a larger whole, namely a systemic structure. This necessitates a clear step-by-step process in practical research: first, the overall thought structure to which the subject of analysis (concept, proposition, part of a structure of thought) belongs must be mapped. Next, the details of the subject of interest are examined, and finally, the relationship between the whole and the subject is demonstrated, including any tensions between them that integrate or give rise to contradictions.

Systematicity, therefore, requires a whole: a system, or a system of thought. The system does not have to be logically consistent; for example, thought structures characterised by inconsistency or logical contradiction, such as those used as principles in youth pop culture, are well-suited to systematic analysis. In such cases, the analysis reveals the elements used and how contradictions have been utilised, but the whole must still be definable. Research belonging to the analytical task can also be conducted without such a given system. Numerous analyses within the tradition of positivist-analytical philosophy are abstract chains of reasoning aiming for universality, but these are not systematic analyses as conceptualised in this chapter; rather, they are syntheses aimed at new philosophical insights. Although it is customary to refer to these as analyses, following the example of G. E. Moore, a distinction can be made between first-degree and second-degree analysis. An example of first-degree analysis would be the clarification of the uses and meanings of the word 'education', which can lead to synthetic insights. An example of second-degree analysis would be the detailed examination of R. S. Peters' texts on education as initiation. Systematic analysis, in the sense used in this chapter, is second-degree analysis.

A typical systematic analysis begins with the worldview of a thinker, researcher, or practical educator. It can also be conducted on the ideas produced by a group, organisation, or institution. The

research task can be limited so that the main problem becomes the investigation of a key concept or set of ideas within their (or the group's/organisation's/institution's) thinking.

An alternative basis for narrowing the focus is the internal coherence (systematicity) of the thought. If the work of a thinker (or group/organisation/institution) is divided into periods during which the worldview has been significantly restructured – such as Ludwig Wittgenstein's transition from early logical atomism to the language philosophy of his later period – the focus is on the part of their work that forms a coherent whole. That said, the thoughts of different periods cannot be assumed to form a unified system a priori; hence, their joint examination would not be systematic analysis but rather a comparison.

The analysis itself is qualitative content analysis, involving the examination (reading, summarising, or presenting in various ways, such as through diagrams or images) of a defined corpus of text or expression. Systematic analysis differs from mere content analysis by delving into the worldview presented through linguistic expression. It is an exploration of the world created by the system, using thought as a tool. The aim is not to present a statistically representative sample but to bring forth key insights that are essential to the thought structure, making it possible to clarify the original set of ideas and, if necessary, continue developing them.

The purpose of the following sections is to highlight the fruitfulness of the described research method, whilst also acknowledging its challenges. One of the undeniable tasks of educational sciences is to analyse internationally significant ideas and theories on education. In recent years, this has mostly been conducted in Finland through journalistic means or, less frequently, using historical research methods. Philosophical analysis has either been lacking or been erroneously equated with historical or quantitative content analysis. This neglect has rendered the discourse

on education somewhat superficial. Even the theoretical sections of empirical studies require a more methodologically in-depth analytical approach. For a philosophically oriented researcher, systematic analysis is therefore a central (though not the only) working method, whereas for an empiricist, it is an essential tool for connecting their own research to the theoretical foundation established by other scholars.

2. Observations on the Development and Use of Systematic Analysis in Philosophy, Educational Sciences, and Related Fields

Systematic analysis is as old as philosophical inquiry itself. Its origins fade into the obscurity of pre-Socratic thought, from which no complete works have survived to the present day. The views of those early philosophers have largely been preserved only through the quotations and analyses of later writers. For instance, the works of Aristotle and Christian theologians contain numerous analyses of the writings of early thinkers. These were not always analytical in the modern sense but often polemical, taking a clear stance. True analysis mainly occurred when the writer agreed with the authority being quoted. Such works include commentaries, which were written for significant authorities such as Plato and Aristotle.

A key example of the form of philosophical thought is Aristotelian logic. The most important works on this topic that have survived to our time are, using their established Latin titles, *Analytica Priora*, *Analytica Posteriora*, *Categoriae*, *De Interpretatione*, *Topica*, and *Sophistici elenchi*. Numerous commentaries on these texts were written, especially during the Roman era, though most have been lost. Three commentaries on *Analytica Priora* remain: the first is part of a commentary on the first book of *Analytica Priora* by Alexander of Aphrodisias from the late second century (the commentary on the second book seems to have been lost during antiquity). The second is a fragment based on Ammonius' lectures from the fifth century, and the third is a book by his student Philoponus the Younger, the only known complete commentary. In addition, a few fragments survive as appendices to

Ammonius' manuscript, along with an Arabic translation of Themistius' fourth-century treatise.

Logic, as a theologically neutral subject, formed a core part of the medieval curriculum and thus suffered least from the dramatic anti-philosophical turn of the sixth century. It was also the first subject to regain its status during the Middle Ages, which led to a heightened appreciation of Aristotle, perhaps even surpassing his esteem in antiquity. Medieval scholars sought more systematic structure in his logic than may have originally existed. Textbooks on logic from the Alexandrian school of thought, which followed this interpretation, became foundational works for teaching philosophy, whilst Aristotle's original texts were seldom read. It was not until the Islamic period, in the ninth century, that a school of Arab philosophers emerged in Baghdad. Here, Aristotle's works began to be translated into Arabic, and the systematic analysis of his writings resumed. One of the most significant commentaries on *De Interpretatione* is the explanation offered by the scholar al-Farabi (870–950; may God be merciful to him!).

As Christianity established its position, systematic work became clearly theological in nature. Nevertheless, it still included a strong analytical contribution, especially regarding the writings of the early church. Interpretation was not so much analysis, but rather the Bible experienced the same fate as Aristotle’s works. The true content of the texts, with the differences between various works, became secondary, and an attempt was made to harmonise them into a doctrinal synthesis. To this day, the system created by John of Damascus in the eighth century has remained the doctrine of the Orthodox churches. It has, in practice, diminished the interest of theologians preserving the Byzantine heritage in analytical work and directed them more towards interpreting texts according to Orthodox doctrine and ritual, rather than the writings of the apostles.

In the Western Church, the approach was different. However, even in Roman Catholic biblical interpretation during the Middle Ages, there were seven different methods of interpretation, all of which, by modern standards, are considered misleading. Perhaps the lack of proficiency in Greek engendered sharper criticism than in Byzantium when Greek texts began to be used more commonly in the West. This happened gradually. Up until the fifteenth century, translations were primarily used. The great humanists of the Renaissance then undertook the enormous task of translating all of Plato's works into Latin, as well as a large part of Aristotle's surviving output. The most notable interpreters included the Greek Gemistus Pletho, and the Italians Pico della Mirandola and Marsilio Ficino, head of the newly founded Platonic Academy in Florence. The humanists also wrote commentaries on these works, but these were more synthetic than analytical (for example, Ficino's Neoplatonic *Theologia Platonica*).

The significance of authorities in philosophical discourse remained crucial until the late eighteenth century. In Western thought, the Church's position was central, and even the Protestant churches' efforts to return to the original biblical texts did not yet involve applying genuine research methods. Humanists who developed important philological tools, also pedagogically significant for systematic analysis, such as Johan Reuchlin, Erasmus of Rotterdam, and Ludovicus Vives, each adhered to the tenets of their respective churches. The major reformers of philosophy, like René Descartes, Baruch Spinoza, and John Locke, were aware of searching for new foundations, but their works were primarily seen as deviations from the correct religious doctrine. Writings on education were, at best, exhortative or critically evaluative, with a clear underlying concept of 'right' and 'wrong' doctrines. For instance, Johann Amos Comenius, one of the founders of didactics,

sought to synthesise his Hussite Protestantism and the philosophy of his time (Bacon, Copernicus, Vives) into what he called *pansophia*.

Perhaps the closest to an analytical approach was Spinoza's 1663 publication on Descartes' philosophy. In his preface, Spinoza specifically states that he is not presenting his own opinions, but Descartes' teachings. However, his motivation for writing was didactic rather than research-based: he did not believe the book's audience was mature enough to absorb his own philosophy. At the beginning of the following century, Gottfried Wilhelm Leibniz thoroughly analysed John Locke's *An Essay Concerning Human Understanding*, a work of significant educational relevance, but his *New Essays* were published posthumously in 1765.

Over the past two hundred years, the views of different scholars and schools of thought have been extensively studied using both systematic and historical methods. Even presenting a general overview is impossible without thorough studies in the history of ideas. A turning point appears to be the philosophy of Georg Wilhelm Hegel. His work coincided with a time when archaeology and linguistics were taking on new, significant roles, opening up the historical treasures of both Eastern philosophy and the cultures of Egypt and the Near East. Hegel himself published a comparative systematic study on the philosophy of two of the most prominent Romantics of his time (*Differenz der fichteschen und schellingschen Philosophie*, 1801). However, of greater significance is his bold generalisation of Fichte's thesis-antithesis-synthesis framework into a dialectical method, according to which every conceptual system can be presented as a synthesis of two conflicting views. This clear approach has consciously or unconsciously structured the thinking of an increasing number of scholars. Its impact has only been marginally reduced by criticism from the historical school, which argues that the dialectical method makes no effort to consider precise factual details.

The most significant methodological insights in the latest developments of philosophy are related to the logical analysis of language. The monumental work of Gottlob Frege, Bertrand Russell and Alfred North Whitehead, Richard Montague, and their followers in systematic analysis is only gradually being applied, mainly as a result of the extensive research inspired by Ludwig Wittgenstein's work (e.g. Stenius' commentary on *Tractatus*, 1960, cf. McDonough, 1986). Some aspects of educational thought are likely so intuitive that they are not suitable for formal specification. However, examples from related fields suggest that even these possibilities should be considered (e.g. Hintikka's essays on the history of philosophy, 1974, and Kirjavainen's experiments in epistemic logic within the history of theology, 1978 and 1983).

A refined middle ground between referencing and formal-logical analysis is represented by the *History of Philosophy* written by the Swedish scholar Anders Wedberg. In this work, Wedberg attempts to reduce extensive philosophical works to brief statements that contain the core ideas. For instance, he addresses Plato's theory of ideas as a logical, semantic, psychological, and metaphysical theory. The metaphysics of ideas can be summarised in the following eight propositions:

A. Ideas are immutable and eternal.
B. Ideas do not exist in space.
C. Ideas are models, of which individual objects are imperfect images.
D. Ideas are, in some way, at least partial causes of the events in the sensory world.
E. Ideas have a hierarchical order. The highest is the Idea of the Good, whose position in the world of ideas corresponds to the sun's position in the sensory world.
F. Ideas are more real than the objects of the sensory world.
G. Ideas are more valuable than the objects of the sensory world.
H. *In this life*, we can only vaguely grasp the true essence of ideas. Our knowledge of them is a recollection of the clear insight we once had before birth when we were able to 'observe' them directly with the eyes of our soul.

Wedberg points out that the theory of ideas is a poetic metaphor, a fantasy, or a premonition, rather than an exact theory. The deepest philosophy cannot be expressed in words but reveals itself to the chosen ones after prolonged contemplation (Wedberg 1958, 60–70.) Simplifications of the type made by Wedberg can be said to be better suited for reconstructing conceptual structures than for highlighting their internal contradictions and fault lines (deconstruction).

Hermeneutic and phenomenological philosophy have brought to systematic analysis a conceptual framework that articulates in particular the intentionality of thought and the holistic nature of its structure. The most central ideas are those of Aristotle scholar Franz Brentano, phenomenologist Edmund Husserl, and Martin Heidegger, one of the most profound users of systematic analysis. Applying these ideas requires a deep understanding of both the works of these authors and the subjects of analysis, as phenomenology centres

around the researcher's own methodically renewing intuition. It is precisely from this tradition of Central European philosophy that the most significant theorist of deconstruction, the Algerian-French Jacques Derrida, emerged. His critical works, such as *De la Grammatologie* (1967), question the validity of conventional reconstructive analysis as a whole.

More easily applicable – yet still useful – are the structuralist views developed in linguistics and literary studies, initiated by Ferdinand de Saussure (de Saussure 1915). In Finnish research, these have particularly been applied through the semiotics of Algirdas Julien Greimas (Greimas 1966, e.g. Silvo 1988 and Salosaari 1989), as well as the applications developed for the analysis of narrative texts by Roland Barthes, Julia Kristeva, and Tzvetan Todorov (Barthes 1966, Kristeva 1970, Todorov 1969, e.g. Tammi 1985). Technical models for analysis are also offered by text grammars, in which material is interpreted as networks of thought expressed according to selected text strategies (de Beaugrande 1980, Enkvist 1975, Gülich & Raible 1977, Petöfi 1988).

Only a few systematic-analytic studies exist in Finnish educational science. In dissertations and licentiate theses, this field of research has, at least up until 1988, been entirely unrepresented. In older literature, more extensive analyses of the history of education or educational science can be found, though generally as a sideline of intellectual history, such as in Risto Kuosmanen's comprehensive biography of Pestalozzi (Kuosmanen 1927 and 1939), Sisko Wilkama's work *The Development of the Principles of Female Education in Finland from the 1840s to the 1880s* (Wilkama 1938), and Aukusti Salo's study *The Education of Young Children in Uno Cygnaeus's System of National Education* (Salo 1939). Against this background, it is unsurprising that the situation is similar in more recent educational literature. However, in the work of Matti A. Sainio, systematic analysis holds a methodologically central position

(Sainio 1953, 1955a, and 1955b). Among monographs, Aimo Peltonen's seminal study *The View of Humanity and Ethical Principles of School Reform* (1979), which seeks to access the philosophy of school reform through committee reports, can be cited as a new type of work. More conventional examples include the works of Isosaari and Sandelin. In Jussi Isosaari's dissertation, observations related to systematic analysis are also presented as part of the early pedagogical instruction at the Jyväskylä Seminary (Isosaari 1961). Singa Sandelin's book *'Self' and Education* includes a presentation of the structure and developmental theories of self-image (Sandelin 1981, 31–64), though this remains limited: its merit lies in its attempt to present the core structures of the theories using a visual model developed by the author.

The above has already extended into a list, where most interest is likely to be found in the gaps that need filling, as a more substantial and intriguing body of literature and research has been written than the quantity mentioned above. Turning to related fields of education, the number of studies that are of interest from the perspective of research methodology in education or systematic analysis has continued to grow. The largest domestic group likely consists of works in the field of systematic theology (the latest examples include Lassila 1987 and Purhonen 1988). To conclude this overview, it is appropriate to mention the Danish meta-theorist of psychology, K. B. Madsen, whose work is also of pedagogical interest. His life's work has focused on the systematic analysis and comparison of motivational theories. His works *Theories of Motivation* (1968), *Modern Theories of Motivation* (1975a), and *Systematology* (1975b) are, methodologically, extremely fruitful. Madsen uniquely describes each theory immanently at first, using its own expressions, and then creates a simplified formula-based translation for comparison purposes. The presentation also includes an illustrative graphical representation. The texts presenting the theories are divided into the

meta-level, the hypothesis level, and the data level, the detailed treatment of which allows for both quantitative and qualitative comparisons. Every systematic analysis is a reflection of the understanding of its time, and even Madsen's reconstructions do not withstand deconstructive criticism. However one-sided they may be, they still offer the researcher a model, demonstrating that only through the careful treatment of numerous theories within the same field can the researcher's eyes be opened to the diversity, possibilities, and one-sided limitations of their own particular field.

3. Systematic Analysis as an Alternative and Complement to the Historical Approach and Content Analysis

Systematic analysis can be utilised not only in educational science but also in research on philosophy, politics, literature, visual arts, musicology, and systematic theology. The research problems naturally differ between disciplines, but what they share is a systematic approach aimed at generating new knowledge in each case. The method is closely related to historical research and content analysis, but strives for a different research approach typical of philosophical inquiry.

Historical research is, in principle, interested in all past events in which humans have been involved in some way. Content analysis, by contrast, focuses on communication in its various forms. Systematic analysis is the theoretically oriented conceptual examination, interpretation, and evaluation of written material. A key aspect is the systematic investigation of the various themes, nuances, contradictions, symbolism, and hidden meanings within the text. Thus, the aim is to reach a deeper understanding of the subject matter. The analysis highlights concepts or thematic wholes that shed new light on the interpretations presented in the text and may render previous interpretations superficial. The research might focus on, for example, a proposal in a committee report, a theoretical structure developed by a theorist, a textbook, or an educational policy declaration. Attention is paid both to what the text aims to highlight and the perspectives it omits, as well as how ideas are justified.

The texts forming the basis of the analysis can belong to the past or be contemporary works. The analysis involves a pursuit of clarity similar to that characteristic of Plato, for example in the *Phaedrus*

dialogue, where Socrates and Phaedrus examine the method of dialectical synthesis and division in concept formation (256de, trans. Pentti Saarikoski).

> **SOCRATES**: There are two approaches, the significance of which would be useful to clarify, if possible.
>
> **PHAEDRUS**: Which two approaches?
>
> **SOCRATES**: First, to collect the scattered elements into a whole under one idea, with the aim of defining it and thereby clarifying what one intends to discuss at any given moment. In this way, we first defined love and then spoke of it; whether our definition was good or bad, at least we managed to speak clearly and coherently.
>
> **PHAEDRUS**: And what is the second approach you mean?
>
> **SOCRATES**: To be able to divide the whole back into species, cutting it along its natural joints without breaking any part, as a poor butcher would.

The aim of systematic analysis is to identify the fundamental factors influencing the phenomenon under investigation and to understand their mutual interaction. Once the analysis has scrutinised even the smallest details, with their causes and influences, the task is to discover the general principles capable of explaining the phenomenon and linking it to broader contexts. In this way, a comprehensive picture of the subject of research is formed. This may require seeking perspectives that differ from previous ones and adopting new concepts and approaches. The underlying rationale is

that the description of the research subject is most efficiently achieved by defining its structure and the functions and roles of its individual parts.

Systematic analysis, historical research, and content analysis can all make use of the same source material. However, when employing these methods, the focus of the research is directed in different ways.

Historical research is concerned with human activities in the past, including their external conditions and social implications. The subjects of research are the individuals involved in these activities, their thoughts and actions, institutions with their structures and methods of operation, the placement of various phenomena in time and place, the roots, motives, and consequences of events, and the development of actions and views. The factual information contained in the sources is examined in connection with the broader set of events from which it originates. The goal is to gain an understanding of what human life, in relation to its environment and other people, was like. This picture is then depicted in a narrative in which humans and their actions are seen as part of the reality of a past period. The focus is on clarifying the development of the phenomenon over time and the factors that influenced it. The perspective can be both chronological and systematic, methodically analysing the research subject.

Content analysis typically deals with written text, but sometimes also with visual material or other forms of communication. The research aims to describe and interpret the characteristics of the subject being analysed, primarily in terms of the connection between the sender and receiver of the message. Attention is focused on what is expressed in the text or images, what topics are addressed, what is left unsaid, and how various elements are emphasised. Additionally, the form and structure of communication, the progression of the message, and the relationship between the content and the phenomena underpinning it are of interest. The context or situation in

which the message was produced may also be examined. Sometimes, the analysis focuses on the motives or aims influencing the creation of the message contained in the text which the author is seeking to achieve. In other cases, the primary focus of content analysis is the medium of communication, such as in studies of textbooks. The goal, for example, might be to examine the readability of the text, its ideological bias, or the potential use of different teaching methods.

After World War II, content analysis became more common in behavioural science research and was initially quantitative in nature. The aim was to compare texts produced in different contexts and to describe the differences and similarities in their content. Researchers sought to identify the quantitative characteristics of texts, such as the number and frequency of certain words, sentence length, or the number of positive and negative expressions related to a particular subject. The rationale for this was that uncovering the quantitative features of a text would provide insights into its content. However, it soon became clear that this quantitative approach was superficial. Counting words and examining the numerical relationships between different parts of sentences could not capture the nuances of meaning within the texts. To grasp these nuances, an interpretative approach was always required. Consequently, content analysis has since shifted towards a more qualitative research method, placing greater emphasis on how and in what context something is expressed, the aims of different expressions, and how statements can be interpreted.

When examining the position and significance of the source texts, systematic analysis makes use of the research findings from fields such as philology, literary studies, and history, but the approach taken to the material differs. For instance, the primary focus is not on the morphology or syntax of language. Likewise, aesthetic literary considerations also take a back seat. Instead, the subjects of the analysis are the meanings of the document’s content as an interpretive whole and the relationship of the parts or images to

this whole, rather than the historical events from which the material originates. The analysis can even be entirely text-based or carried out immanently, setting aside concerns about context and origin. For instance, the educational ideas in Plato's *Republic* can be systematically interpreted as educational theory in their own right, without considering their connection to the political system that was planned for Syracuse in the 360s BC.

Quantitative content analysis breaks down the explicit content of the material under examination, such as the frequency with which a certain concept occurs, whilst historical research might aim to show the circumstances under which the text was created. The information obtained in these ways can often assist the systematic analyst in making interpretations.

Systematic analysis is theoretically oriented and aims to bring to light conceptual wholes. The researcher’s task is to problematise the text's content and structure it to reveal even the hidden core ideas. The research does not simply describe the expressions presented. Questions such as what a concept or view means in the context of a certain historical sequence or how some ideas have evolved are the domain of historical research. Systematic analysis, by contrast, seeks to deepen our understanding of what may superficially seem obvious, attempting to go a step further. For example, it aims to explain why a particular theory, worldview, educational goal, norm, or operational principle is presented the way it is in the document under study. The analysis might examine the logical coherence of ideas, the relationship between educational goals and action, the connection between norms and educational policy views, or the feasibility of implementing ideas concerning education.

Additionally, the correctness of the presented ideas can be examined, which involves analysing the clarity of the thoughts and the arguments presented to support the claims. It is also necessary to assess the validity or significance of the interpreted statements

against certain criteria. This approach is different from that of historical research, the task of which is to investigate past events as they were and to examine how they developed and on what basis, with no attempt being made to evaluate the validity of the ideas expressed in the texts. Systematic analysis is thus closer to philosophical scrutiny than to historical research.

In systematic analysis, it is important to emphasise that criterion-based evaluation is distinct from an opinion based on the researcher's subjective preferences regarding the significance of an idea. The issue at hand is the relation of the points raised in the text to meaningful criteria for interpretation. In the field of education, for example, such criteria might include the logical coherence of objectives in an educational committee report, the relevance of an educational theory in relation to the underlying conception of humanity, or the appropriateness of the courses outlined in a written curriculum from the perspective of a student’s needs and ability to absorb information. An evaluation complementing the analysis of concepts is particularly necessary when self-evident norms or values are being questioned, or when the validity of entrenched views needs to be reassessed.

The focus of systematic analysis can just as easily be on views presented within a particular school of thought, intellectual movement, or theory, such as the ideology of an individual author or the opinions expressed in a document prepared by a group of experts and their justifications. What is essential is the emphasis on uncovering and clarifying the meaning behind the statements made, as well as on exploring the relationships between concepts. Of lesser importance are the historical processes underpinning the creation of the documents being analysed, knowledge of which is only necessary when attempting to explain the origins or development of ideas.

As has already been highlighted, systematic analysis is a form of qualitative content analysis. However, systematic analysis advances

further on a theoretical level than content analysis, which focuses on other types of research problems. Its aim is to identify principles and perspectives that allow for the management and comparison of the conceptual wholes that can be interpreted from texts. At times, it is also necessary to introduce entirely new concepts or construct new theories. This is particularly the case when attempting to synthesise individual components and concepts into broader frameworks.

Occasionally, it is necessary to seek explanations as to why a particular person or group has put forward a specific idea and its rationale, or why representatives of a particular intellectual movement express certain views that are characteristic of them. Otherwise, we may not be able to uncover the functional mechanisms influencing education.

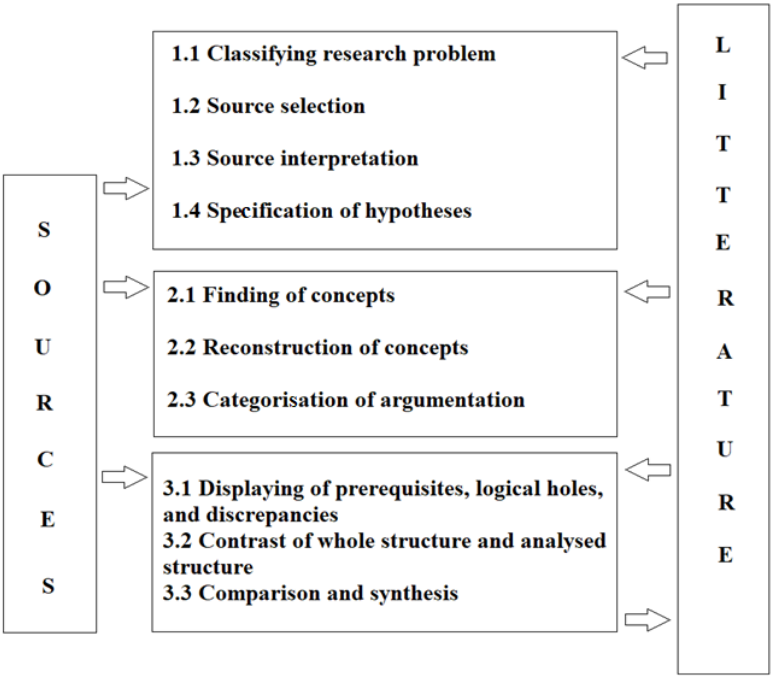
In such cases, theoretical conceptual analysis must be performed. It is not sufficient to rely solely on the interpretation of source material; hypotheses are also needed regarding the different developmental nuances of the document and their backgrounds. The role of these hypotheses in research is heuristic in nature, aimed at generating new interpretations. Hypotheses in systematic analysis should not be thought of in the same way as statistical hypotheses, which are intended to be tested. Heuristic hypotheses, which generate new interpretive frameworks and possibilities, are reasoned guesses that help to better understand what is contained within the text.

4. Stages and Possibilities of Conducting Systematic Analysis

4.0. How the Analysis is Conducted

The process of conducting a systematic analysis can be divided into three main stages:

1. **Problem and Material Identification Stage**
2. **Main Analysis Stage**
3. **Explanation and Application of Analytical Results**


SOURCES
1.1 Classifying research problem
1.2 Source selection
1.3 Source interpretation
1.4 Specification of hypotheses
2.1 Finding of concepts
2.2 Reconstruction of concepts
2.3 Categorisation of argumentation
3.1 Displaying of prerequisites, logical holes, and discrepancies
3.2 Contrast of whole structure and analysed structure
3.3 Comparison and synthesis
LITTERATURE

The first stage is preparatory, with the actual analysis being carried out in the second stage. This may be followed by applying the results for critical, comparative, or historically explanatory purposes.

The first phase, known as the conceptualisation phase, can be divided into:

- the structuring of problems
- the selection of texts
- their interpretation
- the clarification of the problem by formulating hypotheses or questions

In the first phase, the research problems and the material required to solve them are defined. This article refers to the object of analysis as a text because, in most systematic analyses carried out to date, answers to research problems have been sought by dissecting written texts. This narrow focus stems from the literary tradition of Western philosophy, which has been particularly criticised by Derrida for its one-sidedness (Derrida 1967, 18–26). Here, 'text' is broadly understood as any documented product of expressive behaviour that conveys the thoughts of its creators. Thus, texts can include recordings, images, architectural creations, and so on. The consideration of all these new types of material introduces additional perspectives, which are not addressed in detail in this article.

The actual analysis is divided into:

- the search for concepts
- the identification, clarification, and structuring of propositions (claims)
- the examination of arguments

Concept analysis, the (re)discovery of the sentences connecting these concepts within the text, as well as the analysis of broader thought structures (theories, myths, worldviews) and the arguments supporting them, can be alternative tasks. The scope of the research task can be sufficiently defined by focusing on just one of these three levels of analysis. However, it is important to emphasise that from the perspective of systematic analysis, these are complementary viewpoints that are best employed together. Texts can indeed be reviewed multiple times; for example, by initially focusing on the words and word combinations used by the author, then on their central or typical propositions, and finally on the broader thought structures formed by these propositions.

The third phase is not easily broken down into distinct parts: in a work focused on systematic analysis, it generally includes at least the following:

- Identifying the assumptions, gaps, and contradictions in the thought structure
- It often involves comparing the core part of the structure (the Ansatz) with the specific problem being analysed (linkages, structural similarities).
- In comparative, synthetic, critical, or historical philosophical work, the results of the analysis are used as a starting point for further research

The first of these possibilities, which may involve relating the author's main propositions to the reasons given to support them, clearly falls within the realm of systematic analysis, as does the second. The emphasis can be placed either on the reconstruction of the text in a positive light by seeking to understand its claims, or on its deconstruction by identifying its flaws, inconsistencies, and

hidden meanings. Thus, it concerns research that can be conducted immanently, meaning that the analysis follows the concepts and theories of the thinkers themselves without referring to literature external to the selected texts. Sections that rely on external sources, such as additional concepts or metatheories, may be moved outside the analysis into historical or comparative research or ideological critique.

4.1. Structuring the Research Problem

There is no formula, recipe, or guideline for identifying an educationally philosophically intriguing research problem. From previous studies, one can infer the types of problems considered intriguing, deepen their investigation, and adopt them as models with adaptation. It is currently easy to identify problems in Finland that have received little attention. Here, the ideas of significant educational thinkers, such as those of Janusz Korczak, R. S. Peters, and Israel Scheffler, have scarcely been studied. The rise of civil disobedience in political discourse would require an analysis of the educational contributions of key anarchist thinkers. There are also numerous topics in the work of Finnish researchers awaiting systematic analysis: notable examples are J. A. Hollo's view of the theory of education, personality and education in Eino Kaila's work, the idealism of Sven Krohn and Reijo Wilenius – but the list can easily be extended.

A research problem is characterised by cognitive dissonance: the possibility of discovering something new or verifying old, possibly erroneous, understandings. Only rarely are problems in philosophical research new in the true sense of the word; at best, a new perspective

can be found. When applying systematic analysis, the problem often arises from an attempt to refine an image of a particular thinker/school/community that has previously been taken for granted. The usual result is the realisation that the earlier generalisation was fundamentally flawed in its over-simplicity. In formulating the research problem, it is crucial that the researcher constantly reassesses their own preconceptions. These preconceptions are always refined through the research process, but often they also turn out to be wrong.

The motivation for engaging in philosophical research typically stems from an interest in fundamental questions: in educational philosophy, this often concerns views of humanity, the ethical foundation of educational activities (values or aims), or the societal consequences of such activities. Although the desire to chart a comprehensive worldview is an important starting point, the question addressed by the research project must be deliberately narrowed. Focusing on a particular thinker or similar topic already constitutes a narrowing of scope. Even within such work, broad philosophical themes should be broken down into sub-problems. Whilst it is important to conceptualise the larger picture as background, the key sub-problem should be delineated for closer investigation.

A natural place to start is an interesting or influential view held by an individual, group, or organisation. If there have been significant structural changes in the subject's thinking, each period should be systematically analysed separately. The research can be limited to one period alone; for instance, Western scholars of Marx have been particularly interested in his early thought. From an overall understanding of the material representing this specific period, one or a few key concepts, ideas, or theoretical parts can be selected for clarification as the main problem. In the aforementioned studies of Marx, the main problem has often been the analysis of the concept of alienation, as Marx afforded this concept a content in line

with his materialist view, clearly diverging from Hegel's earlier definition. ‘Alienation’ thus serves as a key to Marx's early thought.

In terms of form, problems can be presented either as questions or as propositions (hypotheses) based on previous research or the researcher's assumptions. For problems framed as questions, it should be possible, at least in principle, to answer them, or they should be questions posed by the person under study. In practice, answering these questions during the research process may prove exceedingly difficult. In such cases, it is worth analysing the reasons for these difficulties, as presenting them clearly may advance the research.

In literature, researchers or their working communities often have assumptions related to the research problem. These should be recorded as hypotheses which will later be tested or disproved. When formulating a hypothesis, the problem-type question turns into a proposition − a presumed answer to the problem’s question. Hypotheses should be used whenever there are plausible proposed answers. The advantage of a hypothesis over a mere question is that the researcher has a reliable way of realising when their preconceptions are wrong. This may require radical revisions of their own thinking, which might not be achievable by working with questions alone.

The main research problem can be systematic, historical, or comparative. Systematic analysis is then used as an auxiliary method to shape the material to fit the problem's required form. In all research, it is essential to remember that the formulation of the problem generally changes somewhat as the study progresses, typically resulting in the exclusion of issues initially intended to be included. Research therefore represents a balancing act between a structured, disciplined handling of the posed problem and the need

for reduction in the face of the challenges, or even impossibilities, typical of philosophical investigations.

4.2. What is Analysed: Delimiting Texts

As mentioned earlier, the term ‘text’ is used to refer to all material subject to analysis, whether it be written texts, recordings, visual art, performances, or anything else. The key point is that systematic analysis is based on a clearly defined corpus of texts. The researcher decides which texts to include in the study and which to exclude. Defining the corpus is a crucial part of delimiting the research problem.

The most important criterion for delimitation is the relevance of the material to the issues being studied. This assessment is subjective, but must be based on clear reasoning. The criteria may, in part, be practical, such as considerations of research economy. However, such pragmatic reasons cannot override aspects crucial to the significance of the material. For example, using translations instead of the original texts is not acceptable for primary sources, even though translations are commonly used for secondary purposes. It is advisable to discuss the delimitation of the material with other researchers.

Systematic analysis theoretically uses the entire accepted corpus, not just a sample. However, a statistically representative sample cannot capture both the overall structure of thought and its details. If selection must be made, the relevance of the material, as mentioned earlier, becomes the decisive factor. The significance of the material depends on multiple factors; a portion of the material might be significant to the researcher because previous researchers have not

utilised it. In the case of a large body of material, it is essential to distinguish between primary and secondary sources. Primary sources include those texts that explicitly address the problem under investigation.

The focus of the research can be on manuscripts, published works, or both. In the first analyses of a particular corpus, it may be justifiable to use published texts, forming the first phase of the research history for that material. This requires some level of textual criticism, not least to identify typographical errors, mistakes introduced during editing, and similar issues, as these could otherwise give a misleading impression of the ideas in the corpus.

As research on a particular corpus progresses to a new phase, it becomes necessary to carefully collect unpublished sources (including, in addition to written documents, disks, images, recordings, musical scores, etc.), interpret the entire body of material, and clarify its relationship to tradition, its origins, and its value as a source. In some cases, analysing the genre can provide significant insights into the thought process. Conceptual structures, like artworks, always adhere to existing aesthetic forms: either they consciously follow earlier thinkers' practices or deliberately deviate from them. Recognising historical forms helps avoid gross misinterpretations. Thus, the second phase of researching a corpus involves using other textual sources alongside the main text under analysis. Producing a critical edition of texts is itself a valuable scientific task, although it may be viewed as merely a preliminary step to systematic analysis.

4.3. How Texts are Interpreted

In conducting systematic analysis, it is essential to question the interpretation of the text. It is not always evident that sentences mean what they appear to suggest according to dictionary definitions or what previous interpretations indicate. This is particularly evident when texts are written in a language unfamiliar to the researcher, necessitating the use of dictionaries, grammars, and explanatory works to clarify meanings. Even in other cases, one should consider the possibility that the author might have intentionally misled the reader, a characteristic feature of certain literary genres such as occult or humorous works. When dealing with historical materials, misunderstandings can arise due to changes in language and culture, and such issues may even occur in more recent history.

The interpretation process begins by clarifying the linguistic meaning of the text, essentially translating it into the language used by the researcher. Next, the relationship between the historical and geographical references and reality must be determined. The names of people, places, and things might not refer to the objects familiar to the researcher. In many intriguing works, such as Thomas More's *Utopia*, there are references to seemingly real places that are actually fictional. Conversely, imaginary places and characters often have real-world counterparts, as Dante’s *Divine Comedy* demonstrates. Misunderstanding such references can lead to significant content errors.

Thirdly, one must interpret the allusions in the text. For example, a philosophical text is often replete with references to earlier philosophical writings and might only be fully understood as part of an ongoing conversation. Texts can often be interpreted symbolically, for instance, through a psychoanalytic or Jungian interpretative paradigm. Whilst symbolic interpretation is not a core

component of systematic analysis, it can significantly support the process.

If interpretation proves difficult, it is advisable to create a detailed explanation or commentary on the text. Commentaries on ancient and medieval literature serve as excellent models for this (an example being the Finnish *New Testament* commentary). During the interpretation phase, it might also be useful to compile a concordance – a systematic alphabetical list of key words from the text. ICT tools can facilitate this process through specialised concordance software, which can automatically generate lists of words along with their locations in the text, providing sufficient context by quoting surrounding passages. However, to use such software, the text must be digitised (e.g. through scanning) and formatted appropriately for the program.

4.4. Hypotheses as a Tool in Research

When conducting systematic analysis with the goal of interpreting a scholar's ideas, for example from functionalist, psychoanalytic, Marxist, phenomenological, or activity theory perspectives, the use of hypotheses based on these frameworks can be valuable. Even in text-based, immanent analysis, it is useful for the researcher to employ hypotheses drawn from prior knowledge of the subject and an understanding of the material under investigation. Hypotheses are also crucial when constructing syntheses, as formulating and selecting overarching concepts without the support of assumptions will be difficult.

Interpretive hypotheses, which may be derived from theory, previous research, or even individual observations and life

experiences, can provide guidance on which parts of the text to focus on or the contexts in which particular ideas might appear. The use of hypotheses helps to guide the researcher's search in a focused manner, making the work more efficient and avoiding random, scattershot approaches, which can often waste resources. To ensure that the reader of the research report understands the process followed, it is essential to present these hypotheses in writing, rather than keeping them solely in the researcher's mind. Documenting assumptions is also beneficial for the researcher. Without doing so, the researcher might unconsciously prove preconceived notions correct, believing they are reading the text without bias but noticing only certain aspects. When the basis of interpretation is not written down, its influence may go unnoticed, and the error might only be identified by another researcher with a different interpretive framework.

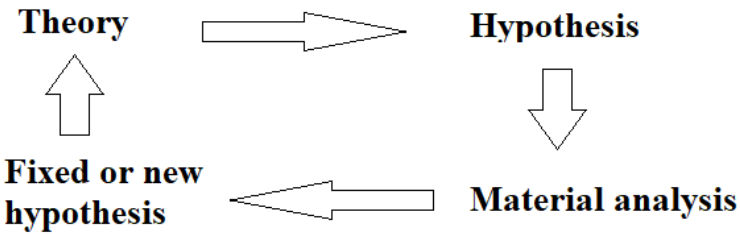
The form of hypotheses used in systematic analysis can vary. Sometimes, it may involve a broad assumption about which types of things might be noteworthy, what might serve as a guiding principle in the connections between different parts of the research subject, or how a particular expression in the text relates to certain intellectual frameworks. A narrower hypothesis might concern the connections between certain concepts or ideas. Occasionally, a hypothesis can involve a general understanding of the nature of the phenomenon being studied, in which case the hypothesis closely resembles a theory that seeks to broadly define and organise the reality under investigation. However, the key point is that the hypothesis serves to aid in making interpretations. It functions more as a working hypothesis – a framework for interpreting the text – rather than the precise cause-and-effect assumptions used in experimental research. When using interpretive hypotheses, the aim is to argue whether or not something is important in the interpretation of the text, rather

than making the kind of future predictions required in empirical research about relationships between events.

It is essential to avoid letting pre-established hypotheses constrain the research. Systematic analysis aimed at interpretation requires that hypotheses can be revised if necessary and that new ones can be developed throughout the research process. Generating useful hypotheses and refining research problems depends on gaining preliminary familiarity with the research material. Posing questions to which the material cannot provide answers does not demonstrate deep thought. Additionally, pre-formulated hypotheses can lead to superficial engagement with the text. The researcher should approach the meanings of statements as openly and as free from bias as possible, so as not to overlook insightful nuances. It is crucial to consider the reservations present in the text, such as ‘perhaps’, ‘sometimes’, and ‘possibly’, and not ignore any clarifications the author might make regarding their general assertions.

The success of research hinges on the researcher's attitude toward their hypotheses. It is inappropriate to try to prove preconceived notions correct at any cost. The outcome will be very different if the researcher deliberately clarifies their preconceptions and asks what would follow if those preconceptions were wrong and what could demonstrate the existence of an error. Can there be evidence to show that a key interpretive element is fundamentally mistaken?

The method for conducting a theory-based analysis of textual material can be schematically depicted as follows:



Not all preconceived notions presented about the material under investigation qualify as hypotheses. For hypotheses to be appropriate, they must be justified either by the theoretical framework or through interpretive objectives. There is often a risk that hypotheses become trivial or peripheral. This occurs particularly when hypotheses are developed solely from the text itself. It is natural for the hypotheses to consist of interpretive ideas based on the expressions in the text, which are presumed to apply to the material being studied. In such a case, the thought process has moved beyond the surface level to deeper layers of meaning, aiming at the multi-dimensionality of concepts and ideas, the exploration of which is a central task of the entire research.

When constructing interpretive hypotheses, one must confront the fact that hypotheses can be formed from very different perspectives and foundations. Therefore, it is essential for the researcher to clarify, both for themselves and for others, the epistemological basis on which their work is built. A notable challenge here is the researcher's own value-bias: it is crucial for them to recognise how their interpretations are influenced by their value system. Becoming aware of and articulating one's own values is a step towards interpretive clarity and depth, which are central objectives of the research. The requirement sometimes posed in the natural sciences that research must not be value-laden cannot be

applied to the type of work that focuses on textual interpretation: content interpretation is always value-laden, and the value system must also be made explicit.

4.5. Discovering Concepts

Concepts are elements of thought and therefore central to all communication, including the interpretation of texts using systematic analysis. When conducting research, it is essential to distinguish between concepts and the words used to express them. To clarify a concept that denotes a certain entity, we need to provide a definition; for instance, by defining the concept through other concepts or by providing examples of entities that fall within the scope of the concept. The words chosen to denote a particular concept can be selected arbitrarily. 'Morning star' and 'evening star' refer to the same entity, the planet Venus, but the words have different meanings for us: 'morning star' refers to a star shining brightly in the morning, whilst 'evening star' refers to the same star shining in the evening. When interpreting the meanings of different words, it is important to be clear about what the word is referring to.

The concepts that form the whole and upon which systematic analysis are built can be selected based on various criteria. Firstly, such selection must take account of the fact that all elements essential to the problem under investigation must be included. Phenomena related to education gain their significance in connection to the whole to which they belong. The concepts employed must also be coherently linked to each other and to the whole. Sometimes, the formulation of the research problem itself provides clues for selecting the concepts to be used. As in all research, it is necessary in

systematic analysis to refine the research idea and the often broad research objectives into detailed problems that await answers. This involves problematising the phenomenon under study, attempting to delineate the concepts that construct the research subject, the relationships between concepts, their basis, the whole formed by the concepts, and the connections of this whole to phenomena outside the text.

When systematic analysis is conducted on a theoretical basis, the starting point often provides hints for the selection of concepts. When examining education as part of the social system, concepts such as Plato's 'justice', Durkheim's 'anomie', Giddens' 'structuration', Derrida's 'differance', Wittgenstein's 'language game', or the Marxist concept of alienation may offer useful starting points for text analysis.

In the field of didactics, similar examples could include Flanders' concept of 'social interaction', Herbart's 'interest', Dewey's 'learning by doing', or the concept of 'problem-solving', emphasised by Turner and many others. When analysing writings related to teaching planning, a good starting point could be, for example, Goodlad's (1979) three-dimensional curriculum model which he developed with his colleagues. This model is based on the structural division of the curriculum into different levels, fundamental elements, and a set of qualitative dimensions, which are represented by concepts that comprehensively structure teaching planning.

Dividing the curriculum into different levels highlights variation in the degree of abstraction of the plans, from a theoretical ideal plan to an experiential level. When conducting systematic analysis, it is essential to pay attention to whether the plan in question is ideal, official or formal, self-prepared by the teacher, implemented, or experienced. The basic elements of the curriculum, according to the presented model, include the objectives of teaching, learning materials, teaching content, learning environments, teaching

strategies, evaluation, different groupings, the timing of teaching, and facilities. Examples of qualitative dimensions linked to these elements include the decision-making process, the basis on which the decisions are made, the individualisation of teaching, as well as obstacles and facilitating factors in the implementation of the plan.

When the task is to find order in a conceptual whole, where the relevant systematic structure is not known in advance, the key central concepts usually emerge from the text under study. The selection of concepts can be directed by the plot of the analysed text, its guiding principles, the layering and hierarchy of the content, the author's aims, mode of influence, motives, and reasoning, as well as the procedures used in the search, organisation, structuring, and classification of the essential characteristics of the content. The contextual relationships between different parts of the content and their connections, various tensions and power relations, as well as the mechanisms behind the ideas, can also aid in concept selection. Furthermore, taking into account views opposing the author's ideas, the examples they use, any digressions from the topic, or whether the reasoning is consistent, can all provide stimuli for concept selection.

4.6. Reconstructing Arguments

When familiarising oneself with the material to be analysed, the focus is on identifying the concepts and sentences (statements, questions, examples, etc.) within the text that express the author's main ideas and related subsidiary thoughts. It is important to note that the essential message of the author may not necessarily be in the form of a statement; it could, for example, be presented as questions. Statements may appear explicitly in the text, but more often than not, the analyst reconstructs or rephrases them after thoroughly familiarising themselves with the entire textual material. The analyst's task is, therefore, to identify and reconstruct those elements that reveal something essential about the text.

Once the researcher has identified the key concepts from the material, understood their content and significance, and thus made the text more familiar, it becomes easier to locate the arguments presented in the text. When reading the text, attention should be paid not only to the concepts but also to the propositions expressed by the sentences, namely their thought content. The same idea can be conveyed in different types of sentences and in different ways.

The researcher can also formulate a hypothesis from an argument, seeking its logical conclusions and supporting evidence from within the text. Furthermore, it is essential to assess the validity of the justifications provided by the author in support of their arguments.

The text should be read carefully using close reading techniques. In practice, multiple thorough readings, possibly with varying perspectives, are usually required to gain a clear understanding. In systematic analysis, as in other qualitative research, it is often useful to employ paraphrasing, which involves trying to express the text in different words or forms.

At times, arguments can be expressed not only through linguistic means but also in other ways. An argument can be presented in a formal manner, such as A -> B (read as: if A, then B; for example: if the author considers the realisation of educational equality important, then they support the openness of higher education). A central point can also be illustrated with a diagram, where symbols are accompanied by explanations of their meanings.

If the analysis is confined to the primary text material, arguments are sought and reconstructed solely based on what emerges from that text. However, if a method is employed that incorporates other information besides the primary source, such as other works by the author, their life, or certain historical documents, then the foundation for reconstructing arguments is broader.

A text can undergo either a historical or philosophical reconstruction. Following a historical reconstruction, a philosophical one can be built, but a philosophical reconstruction can also be constructed without a historical one.

If there is a question about how to discern the main argument, the subsidiary argument, or the justification, reference can be made to the researcher's expertise and their reasoning. The main arguments, subsidiary arguments, and justifications may not always be clearly distinguishable, but the problem formulation and the way the text is structured may provide clues.

Reconstructing arguments is not always possible. The text may be written in such a form that it is difficult or impossible to deconstruct later. In such cases, a deconstructive approach may be helpful (see Chapter 4.8).

4.7. The Structure of Argumentation

Argumentation refers both to the part of an argumentative chain that consists of premises or grounds and a conclusion, and to the premises or grounds themselves. Argumentation analysis involves examining the ways in which claims are justified and the construction of chains of reasoning.

The text under analysis may contain a main claim and its justifications, as well as supporting claims and their justifications. The style of discourse may vary: it could present numerous premises followed by a claim, or a claim followed by justifications.

The analyst's task is to identify the arguments and evaluate their validity. The original idea should not be corrected or amended. There may be a specific and coherent structure of argumentation within the text which can be reconstructed. The argumentation structure is the logical deep structure of the text.

The researcher can start from the assumption that the author has a particular thought system (theory, worldview, plan) according to which they have written their text. This thought system is reflected through sentences, chains of argumentation, diagrams, mathematical expressions, and so on. The text and the ideas it contains can be seen as part of a broader chain of communication; indeed, the text may serve a particular societal function. For instance, reports and inquiries about open higher education may have the societal goal of raising the educational level of citizens and reducing the elitism of higher education.

When the main claim is a statement in the text that conveys the author's essential message, the justifications or premises are the words and sentences where the author discusses their main claim or topics relating to this. The process of searching for and reconstructing the argumentation proceeds similarly (and in practice,

usually simultaneously or in an intertwined manner) to the process of identifying the claims – the text is read multiple times to identify the sections related to the main claim.

It is important to note that arguments, including both claims and their justifications, can only be found in the analysed text itself. They are not to be sought elsewhere or imposed from outside the text.

4.8. Contradictions and Gaps

When examining the claims within the textual material and the associated argumentation, it is vital to also pay attention to contradictions. These can be categorised as follows:

1. **Claims and expressions that contradict the formulated hypothesis**.
   Such contradictions result in the need to reject, modify, or refine the hypothesis.
2. **Internal contradictions within the text**. In such cases, it is necessary to ask what the cause of the contradiction might be. Is it due to a misunderstanding by the analyst, or could it be a sign of weak coherence within the text, or an intentional contradiction introduced by the author? In deconstruction, these kinds of contradictions are the main focus of analysis. A distinction can be made between contradictions that are overt, such as two incompatible pieces, and hidden contradictions, which are more difficult to detect. These might even be deliberate, appearing as a kind of seam within the text.

The researcher may also notice gaps in the text. This occurs when something is missing that one would expect to be part of the conceptual framework. It is as if a particular aspect has been bypassed or neglected. Such gaps in the text should be noted and their significance considered. Gaps and contradictions can be obstacles when the analyst strives to construct a coherent understanding of the text being analysed. By contrast, the gaps and contradictions within the text under study are the focus of deconstruction. Within this approach, marginal notes, manuscripts, and multiple elements that are often overlooked in traditional text studies are central to the research. In fact, radical deconstructionism posits that the search for a coherent structure should be abandoned altogether.

4.9 Comparing the Holistic Perspective with the Parts Studied

When making interpretations as part of systematic analysis, it is important to emphasise the connection of the parts under study to their respective contexts. Attempting to interpret an isolated word or sentence can easily lead to misunderstandings. It is only within the conceptual whole to which the statement belongs that a foundation for meaningful interpretations is provided. Furthermore, such a whole can give rise to characteristics that would not be possible with isolated elements alone.

However, the concept of a ‘whole’, as referred to here, is problematic: it is not at all self-evident which set of components constitutes the whole in question. Thus, when discussing a ‘holistic perspective’, it is necessary to specify which conceptual whole is

being referred to. Is it the researcher's own view, the perspective of the text's author, or perhaps the logical unity of the structural components of the subject under study, which is independent of the individual making the interpretations?

5. Immanent Analysis

Immanent analysis refers to an approach where the theoretical framework is confined solely to the text being studied, relying exclusively on its concepts. The term ‘immanent’ literally means something that is present or internal, and ‘immanence’ denotes something contained within itself, not exceeding its own boundaries. By contrast, the term ‘transcendent’ refers to that which lies beyond experience and, thus, beyond the possibility of knowledge.

In text studies, following literary research methods, two distinct approaches can be identified. The first is the work-centred or text-centred method, where the focus of analysis is the text itself, examined in isolation. The second approach is context-centred, where supplementary materials such as other writings by the author, texts by other authors on the same subject, or interpretative traditions are used to contextualise and complement the analysis. In such cases, background information on the text's creation, historical and societal contexts, or the author’s life can be instrumental.

The divergence in research methods is also evident in the distinction between New Criticism and historicism within literary studies. In historicist research, the text is considered in the context of its historical conditions (viewing the text as a fact of the author’s life), whereas New Criticism bases its analysis solely on the text itself. New Criticism critiques historicism for what it calls the ‘intentional fallacy’, a concept discussed in William K. Wimsatt Jr. and Monroe C. Beardsley’s influential article ‘The Intentional Fallacy’ (1945). They argue that it is erroneous to base interpretations on the author's intentions or what the author allegedly meant to convey. René Wellek and Austin Warren's ‘Theory of Literature’ (1949) also made a clear distinction between text-centred and context-centred literary research.

Immanent analysis shares similarities with New Criticism. In immanent analysis, hypotheses, claims, concepts, and conceptual constructs are drawn from the text itself, not from external sources. The analysis may refer to external contexts but must do so using the text's own terms. The essential question is whether the researcher examines the text from within or analyses it from an external perspective. In immanent analysis, the researcher aims to penetrate the text deeply, relying on a dialogic engagement with the text and an intuitive understanding of its key concepts and central thought structures.

In principle, systematic analysis is either entirely immanent or, at the very least, requires an immanent approach at some stage of the research. Otherwise, the researcher may construct an interpretation that fundamentally differs from the original content of the material being studied.

The researcher brings their own knowledge and experiences to the interpretative process, supporting their analysis with reasoning and critical thinking. The models and methods of qualitative text analysis, as well as its outcomes, differ fundamentally from statistical content analyses. Qualitative text analysis is a methodologically distinct approach. Its results are not quantitative but, for instance, can involve explicating the message of the text, uncovering new perspectives, or understanding aspects that are not directly apparent. The foundations of text research are subjective, making it essential for interpretations to be explicitly justified.

Immanent analysis can be complemented by critique. Critical analysis involves, for instance, ideological critique or assessing the societal consequences of a theory or idea. In such cases, the research material is examined critically according to the principles of the chosen background theory. An example of a critical analysis that has attracted attention in the field of educational policy is Daniel Kallos's

work ‘Den nya pedagogiken’ (1978), which analyses and evaluates Swedish dialogue pedagogy.

If a comparison between two types of materials is required, both should first be analysed immanently. Following this, a few key claims or themes can be selected, and their presence or absence in each material can be compared. In practice, the reading, analysis, and comparison of materials often proceed in parallel. Excellent examples of comparative research are Madsen's (1969, 1975) works on motivation theories

6. Evaluation of Systematic Analysis

Systematic analysis cannot be evaluated in the same manner as a novel, singular research method. It is an essential component of almost every scientific project based on previous thinking, development, or research activities, whilst simultaneously constituting an independent field of study. Scientific work is built upon familiarity with the thoughts of previous researchers. One might ask why these thoughts should be read from systematic analysis reports rather than from the original works of the philosophers and researchers themselves. However, this is a rhetorical question: primary sources should always take precedence, and systematic analysis is not meant to replace the reading of original texts; on the contrary, it aims to enhance and facilitate their use.

The basis for evaluation cannot be the prevailing situation in educational sciences in Finland. In recent years, few systematic analyses have been conducted, and education on analytical possibilities has been minimal. In such a situation, it is understandable that the procedures have been tentative. Even in published works, one can find examples where key sources relevant to the topic have been ignored or where the analysis has been conducted using translations of the author's works instead of the original texts. A common shortcoming in studies conducted in Finland is that they have not engaged with reports from the international research community on the subject. Such deficiencies may be acceptable in preliminary explorations of a research topic, but not in formal research reports.

The evaluation of systematic analysis must be performed according to criteria appropriate to the subject. The usual evaluation criteria for empirical research cannot be applied to systematic

analysis, although the demands for systematicity, objectivity, and reliability are fundamental to all research work. As previously mentioned, the conventional requirements for theory or a conceptual framework cannot be applied to immanent analysis. In the initial stages of research at least, the content of the theory being analysed can serve as its own conceptual framework. The situation changes, of course, if a theory from outside the primary material is adopted. Its selection and application can be subject to the same requirements as in empirical research. Likewise, it is generally not appropriate to calculate reliability, consensus, or validity coefficients in the context of systematic analysis. Quantitative content analysis is generally less relevant. However, the analysis must still be verifiable, demonstrating with references and citations which parts of the texts the conclusions are based on. Every reader thus becomes a 'parallel coder', checking the researcher's breakdown.

Like all research, systematic analysis should be approached critically. A common mistake is that the immanent part of the analysis is inadequately conducted. Researchers often proceed to apply an external framework, critique, or comparison before thoroughly clarifying what the researcher or thinker in question precisely said or wrote. This shortcoming is challenging to correct later in the research. For example, discussions on behaviourist educational technology have been distorted when the views of neobehaviourists have been criticised based on the one-sided perspectives of early radical behaviourists. Conversely, purely immanent analysis can easily go astray if it is motivated by uncritical admiration of the ideas being studied. The congeniality required for analysis can lead to presenting the subject as having originated ideas clearly borrowed from earlier thinkers or having addressed contemporary questions that were foreign to their time.

This article has referred to the subjective nature of systematic analysis. This does not imply inappropriate bias, such as attempting

to find support for ideas the researcher considers valuable whilst ignoring opposing arguments. Nor does it mean that the researcher is free to interpret texts by speculating about the author's thoughts or colouring their own interpretations based on what they themselves believe to be true, acceptable, or valuable.

Subjectivity in systematic analysis means that the researcher's experiential background and chosen starting points reflect how the research is conducted and how interpretations are made. The goal is to get as close to the research subject as possible. To maintain criticality, the researcher must ensure that:

- The starting points of the research, theoretical perspectives, and decisions regarding the selection of texts are clearly stated.
- Methodological choices, underlying assumptions, and principles of interpretation are presented clearly and thoroughly justified, the research topic is problematised and conceptualised in such a way that the core ideas and nuanced details can be accessed.
- Preconceptions and interpretative traditions do not overly constrain conclusions; new nuances and perspectives should be possible; by comparing them with previous ones, what is novel can be highlighted.
- The justification for interpretations is checked by examining them in the context of ideas presented in various parts of the texts.
- Interpretations are not limited to the first ones that come to mind; efforts should be made to uncover the potential multi-layered nature of the texts, as well as the contexts in which specific views were expressed and how they were justified.
- Alternative interpretative solutions that differ from one's own views are also presented.

This article has emphasised immanent analysis in particular. This type of analysis may seem somewhat unproductive if it is merely paraphrastic. In practical research work, the researcher’s own conceptual framework often serves as the starting point. This choice, however, is deliberate: if the internal understanding of the text author's worldview is inadequate, no comparison or critique can correct the resulting biases or errors. When using one's own conceptual framework or that of a theoretical framework, the researcher must be aware of the problems arising from the gap between the text and its transcendent interpretation using foreign concepts. It is difficult to provide guidelines for this, as the process of text research based on understanding is concealed behind methodological research recipes.

Although systematic analysis has a long history, its application in our field is rather limited. A large number of new ideas, such as semiotics and deconstructionism, offer almost untapped possibilities for educational sciences. The decisive factor will be how creatively and seriously these possibilities are explored. Only deep and internationally pioneering research work can fulfil the promise of delivering research findings that benefit practical educational activities.

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Jari Jolkkonen

SYSTEMATIC ANALYSIS AS A RESEARCH METHOD

Method Guidelines

Foreword

Since at least the time of René Descartes (1596–1650), the scientific method, or methodology, has been considered a central hallmark of scientific activity. This method is the ‘path’ that a scientist follows to arrive at research findings. Some theorists of science have even suggested that science has no other enduring characteristics.

In Finnish theological education, a concise presentation of the methodology employed in systematic theology has been notably absent. Such a presentation would aid students taking their first steps on the path of scientific inquiry by introducing them to the process of conducting research.

The current work by theologian Dr. Jari Jolkkonen addresses this gap. It offers an introduction to the often somewhat elusive concept of systematic analysis.

Jolkkonen has been given access to a multilayered collection of materials, supplemented by various researchers from the Department of Systematic Theology at the University of Helsinki. The earliest parts of this material trace back to the master of methodological instruction, Professor Seppo A. Teinonen, and the most recent version was passed on to Jolkkonen by Associate Professor Toivo

Holopainen. Jolkkonen has further developed and integrated this material with the best current Finnish methodological text, the collection *Argumentti ja kritiikki* edited by Marja-Liisa Kakkuri-Knuuttila. Diligent and serious students will naturally acquire this text for themselves and utilise it in their thesis work.

The teachers of systematic theology at the University of Joensuu – Professors Gunnar af Hällström and Eeva Martikainen, along with lecturers Esko Ryökäs and Pekka Metso – have read the manuscript of this methodological guide and provided valuable feedback. The final version was reviewed by Professor Hannu Mustakallio, head of the Western Theology subject group.

Jari Jolkkonen's introduction serves as a handy first aid for the intellectual wounds that easily occur during the thesis-writing process, wounds that all too often delay the completion of the work. With this foundation, it is easy for the instructor of a methodology course to progress, and for the novice scholar to walk effortlessly along the path of scientific research.

Ash Wednesday, 21 February 2007, Joensuu
Petri Järveläinen
Professor of Systematic Theology

Introduction

Systematic theology primarily examines the content of Christian faith and ethics. More broadly, its field of study encompasses all theological, philosophical, and ethical thought. The range of texts under investigation spans the entire 2,000-year history of Christianity, from the Church Fathers and ecumenical councils to contemporary doctrinal debates and models of modern theology. Ultimately, it extends to all intellectual movements from antiquity to the present day. The central subjects within this discipline are dogmatics, ecumenics, theological ethics, and the philosophy of religion. Within these areas, various ‘sub-disciplines’ are commonly distinguished, such as patristics, the history of dogma, symbolism, the theology of spirituality, liturgical theology, missiology, theology of religions, social ethics, and the different branches of philosophy (ontology, logic, epistemology, moral philosophy, philosophy of science, etc.).

In systematic theology, the most commonly used research method is that of systematic analysis. This method comprises a collection of various techniques for analysing text aimed at 1) elucidating the internal world of the text (such as concepts, assertions, argumentation, and assumptions) and 2) presenting the findings as a logically organised whole. Based on this analysis, critical questions may be posed to the source texts, or content-related issues may be identified. At the dissertation level, this analysis is used to introduce new insights and/or to modify previous research.

A hermeneutical process similar to systematic analysis is also necessary and is employed in church history, practical theology, and exegesis, as these disciplines, like all humanistic research, seek to read, understand, and interpret the selected source texts. This

methodological guide aims to briefly introduce systematic analysis by answering the following questions:

- When is research considered scientific?
- What is referencing?
- How does a summary deepen into an analysis?
- What is systematic analysis?
- What do system-immanence and structuring principle mean?
- How can argumentation fail?
- What are the different stages of conducting research?
- What are the components of a dissertation and their functions?
- What are the criteria for evaluating a thesis?

When is research considered scientific?

Every person, including researchers, has personal presuppositions, opinions, and values. However, one of the most essential characteristics of scientific research is the pursuit of universally valid knowledge. This involves striving for ‘objective’ knowledge that should transcend an individual's ‘subjective’ perceptions and be true regardless of time, person, or place. Acquiring such universally valid knowledge is challenging, and some theorists of science even consider it impossible. Nevertheless, the pursuit of this goal is regarded as the mission of the scientific community.

Natural sciences and humanities share the following common goals: 1) posing questions in search of new knowledge, 2) providing answers based on arguments, and, importantly, 3) testing the provided answers using the scientific method. The disciplined yet creative application of a scientifically accepted method is one of the most widely recognised hallmarks of science.

However, the questions themselves differ. In the natural sciences, one might ask, ‘Is the tendency towards alcoholism hereditary?’ In the humanities, possible questions could be, ‘Was Agricola's mother tongue Swedish?’ or ‘Did Jesus approve of divorce?’ The differences in such questions lead to a search for answers in different types of materials and then testing them using different methods.

In the natural sciences, answers are sought from observable reality, such as the genetic makeup of alcoholics and non-alcoholics. Through experiments and observations, the aim is to provide the most plausible answers possible. The conclusions reached represent the most explanatory theory – until new research revises or refutes them. In the humanities, such as philosophy, history, and theology, answers are most often sought in texts, such as Agricola’s writings or the Synoptic Gospels. Hypotheses are tested through interpretation

and analysis, with the researcher asking whether this is the correct interpretation of the text.

Interpretation often progresses within the so-called hermeneutic circle, which can be summarised as follows:

1) pre-understanding (cf. hypothesis),
2) reading the text with understanding (cf. data analysis),
3) correcting the pre-understanding and presenting a credible overall interpretation (cf. presenting research findings).

Initially, the researcher has some pre-understanding of the text and the matter it represents. However, pre-understanding or intuition is not an academic original sin that must be combatted at all costs. Rather, it is the raw material of all interpretation and a necessary prerequisite. However, pre-understanding must be the starting point, not a predetermined conclusion; otherwise the interpretation of the text becomes distorted, transforming into a tendentious presentation of one's preconceived notions.

Pre-understanding is refined and often corrected into a credible interpretation through the analytical reading process. At its simplest, this involves a question-and-answer technique. The researcher identifies claims in the text, each of which is an answer to a specific question. Simultaneously, they search for the overarching question that the text as a whole seeks to answer. The goal is a credible or apparent interpretation – one that allows for a convincing explanation of both the text as a whole and its individual details. Ingenuity and creativity are essential for arriving at an apparent interpretation.

The hermeneutic process includes the so-called principle of interpretative charity, where the initial assumption is that the author and their text are internally consistent and coherent. This assumption

is only adjusted when it is clearly proven to be incorrect, that is, when the text contains obvious internal tensions. An overly credulous interpreter may fail to notice these tensions, whilst an overly critical one might prematurely deem the text to be contradictory.

As a scientific method, systematic theology adheres to the general characteristics of science; namely, the pursuit of (1) objectivity, (2) criticality, (3) transparency, (4) autonomy, and (5) self-correction. Instead of fulfilling individual researchers' personal preferences and desires, the aim is to attain knowledge that is as universally applicable as possible (objectivity). Furthermore, rather than engaging in uncritical admiration or polemical attacks, the researcher should maintain a critical distance from the subject of study in order to conduct an analysis in accordance with scientific method and form (criticality). Scientific research is not based on esoteric knowledge; instead, it is conducted within a scholarly community, where all research must be subjected to public evaluation (transparency).

A scientific theory should never be set in stone; it must always be open to testing, correction, and refinement through a more explanatory theory (self-correction). No interest group, political party, revival movement, church denomination, or commercial enterprise should dictate research outcomes; these should emerge freely within the academic community using the methods it endorses (autonomy).

For instance, if the research task is to investigate the views of Judaism held by John Chrysostom, Martin Luther, or Pope Pius XII, the ideal is that the research results should always be the same, regardless of the researcher's religious beliefs. But this is easier said than done. In our example, all three figures are important to different churches, and for various reasons, all have been associated with the shadow of antisemitism. The researcher's precision and impartiality

face a difficult challenge, especially given how sensitive the subject of antisemitism is in the post-Holocaust world. If a researcher interprets their sources in a tendentious manner, then one way or another, their theory will likely end up in the dustbin of history – this is what scientific self-correction entails.

Nevertheless, these principles should not be interpreted too narrowly, lest they turn against themselves. Firstly, the principle of objectivity does not mean that good research must be timid and dull or that the researcher cannot put forward their well-reasoned arguments – science advances precisely through claims based on research and thought. Secondly, the principle of autonomy does not exclude universities from interacting with the surrounding society, such as with political parties, civic organisations, and the business sector. Thirdly, the principle of criticality does not imply an arrogantly critical attitude, nor does it exclude identification with the subject of research; often, such identification can be essential in the process of understanding. A scientific worldview and a religious worldview are not mutually exclusive. Finally, the principle of transparency does not mean sensationalism or gaining publicity for one's subject at any cost.

What is summarising?

A prerequisite for systematic analysis is the ability to summarise a text in an understandable and reliable manner. A summary is a significantly condensed and objective (as far as possible) account of a text, such as a scholarly article or monograph. Summarising is an essential tool for scientific methodology.

On the one hand, summarising is merely a tool and a prerequisite, not a scientific research method in itself. A summary concisely, understandably, and as accurately as possible, conveys the core content of a text, but it does not usually reveal new information about the coherence of the text or the ideological foundations of its author's thinking. On the other hand, summarising is a necessary tool because it provides the foundation for analysis. If a researcher cannot summarise, that is, describe the content of a text in an understandable and reliable way, it is often a sign of difficulties in comprehension. In such cases, the conditions for the actual analysis of the text are non-existent. If the researcher has not correctly understood the text, how could they possibly succeed in its analysis?

Why is summarising necessary?

The ability to summarise is a crucial prerequisite for systematic analysis and historical description. It teaches one to understand and dissect the logical connections within a text. Whilst achieving a high grade requires the ability to analyse, a well-crafted summary can still result in a pass mark for a thesis.

In both a proseminar thesis and a master's thesis, summarising is required in the main body of the text as a prerequisite for the systematic analysis of sources and, in footnotes, when engaging with other researchers' work.

So, how is a summary created? A good summary does not usually come from simply opening a book and immediately starting to read and write. More reliable results are produced by following a sequence akin to that below:

- Start by carefully reading the introduction and table of contents of the book (or article).
- Skim through the section to be summarised to obtain an overall view.
- Read the text again thoroughly, making notes and underlining key points whilst continually trying to identify the core idea –the central theme or main argument. Consider what the central concept is, what stems from it, and what is merely peripheral.
- Pay special attention to sections where the author 'reveals themselves', presents hypotheses, makes assertions, draws conclusions, and argues in favour of a particular claim.
- Once you have identified the core ideas, describe them in your own words. You can strengthen your summary and assertions by

using key terms and direct quotes from the text. However, avoid overusing direct quotes.

- Do not leave quotes ‘hanging’, leaving the interpretation to the reader; for example: ‘Pöhlmann says, *“*What seems natural to one is unnatural to another.*”* Instead, confidently offer your interpretation, with the quote serving as reinforcement: ‘Pöhlmann argues that what aligns with human nature is understood contradictorily in current discussions: *“*What seems natural to one is unnatural to another.”
- The summary must be reliable, giving the reader the impression that the summariser has correctly understood the material and is focusing on neutrally describing the world of the text, rather than conveying their personal opinions.

Common deficiencies in summaries

A summary can be deficient for several reasons, the most notable of which are the following:

1. **Misunderstanding**: The core content of the text and key terms have been misunderstood.
2. **The copy-paste method**: The summariser merely picks out sentences from various parts of the text without forming a coherent, logically progressing whole.
3. **Collection of quotes**: The summariser relies almost exclusively on direct quotations, leaving it unclear as to whether they have truly understood what they have read. Although it is important to quote key terms and sentences verbatim (using quotation marks!), the summariser should present the main ideas in their own words.
4. **Incorrect emphasis**: The summariser has misunderstood the intention and main points of the text.
5. **Unclear distinction**: The ideas within the text and the summariser's own views are mixed together.
6. **Front-loaded summary**: The summary is unevenly weighted, with the early parts being overly detailed, whilst latter parts skip over key ideas with only brief mentions. Such imbalance often indicates a rushed or improper reading technique.
7. **Obvious bias**: The summariser approaches the ideas in the text either with uncritical admiration or sharp disapproval, expressing this in a way that undermines the summary's credibility. Although it is acceptable to take a stance, this must be based on argumentation and not compromise the impartiality of the summary.

How does a summary deepen into an analysis?

The term ‘summary’ generally refers to a type of text that describes or refers to the main content of another text in an understandable and accurate way. The word ‘analysis’, by contrast, can refer to: (1) a method based on analysing, (2) the process of analysing, (3) the outcome of the analysing process, or (4) the oral or written presentation of the results of the analysing process. Here, I discuss analysis in the last sense (4), which encompasses and includes the previous meanings (1-3).

The difference between a summary and an analysis is not easy to define. This is partly because a good summary is more than just a ‘mere summary’ – it already contains elements of interpretation and analysis. To provide a reliable account of the content of a text, one must at least identify and understand the key concepts, claims, and the flow of argumentation. Writing a good summary is, therefore, a challenging skill, one that already involves elements of the analytical interpretation process.

The difference between a summary and an analysis can be illustrated using the example of an academic book review. Initially, the book reviewer typically aims to present the book's subject, plot, and main content in a neutral manner (the level of summarising). The book itself takes the spotlight and is given its turn to speak, whilst the reviewer remains in the background: ‘Kalle’s work focuses on the question of how the relationship between God and the world is understood in Christianity.’

After this, however, it is the turn of the book reviewer turn to step into the foreground. Following the general overview, the reviewer strives to concentrate on some of the concepts and arguments they consider central to the book’s entire reasoning (the level of analysing). For instance: ‘As a counter to the correlation

theology of his time, Kalle emphasises that the only relationship between God and a world fallen into chaos is, as he states, an "infinite qualitative difference."' Concomitant with this, the critic may highlight unspoken assumptions that underpin the argumentation but are not necessarily expressed explicitly: 'Underlying Kalle's thinking is a stark ontological dualism in which there appears to be nothing but an insurmountable chasm between the realities of God and humanity.'

Finally, the book reviewer may offer critical observations, point out problems, or even present counter-arguments based on reasoning. 'Extreme dualism seems to drive Kalle close to a pessimistic Gnostic view of reality, in which the world is seen as a kind of disturbance. One might ask whether this is not in conflict with the classical Jewish-Christian belief in creation, which holds that the world was created good.' (The astute reader will already have noticed that Kalle's thinking bears a striking resemblance to the early phase of the Swiss theologian Karl Barth.)

It is important to note, however, that if the reviewer ends up refuting the book's arguments, they are generally expected to propose an alternative interpretation or another, more compelling theory: 'This interpretation is better for this text/subject because - '. Whilst it is important to be critical, an approach that focuses solely on deconstructing others' theories without offering constructive alternatives can also be a sign of intellectual laziness.

In systematic analysis, summarising and analysing are not merely sequential but, more importantly, are interwoven. The structure of the thesis itself is a result of analysis. It often does not follow the structure of the source text but instead presents, often at the outset, a key premise, underlying assumption, or core argument upon which everything else in the source text is built and which thus illuminates or explains all other aspects. For an analysis to be successful as a text, it must be both comprehensible and convincing. Both of these

requirements are generally enhanced by incorporating sufficient summarisation of content into the analysis. By selectively summarising certain parts of the text, it is possible to create the context within which the analytical observations are made. In addition to the summarising sections and the actual analytical sections, an analysis should also include a ‘framework’ that explains what is being done and why.

Writing summaries is beneficial as a methodological exercise, but it also proves useful for producing and guiding a thesis. For instance, creating a summary provides a solid foundation for gaining mastery over the material (sources or literature). A well-crafted summary is of immense assistance to the thesis supervisor when considering what might be worth researching in a given topic. However, in a formal thesis, it is generally advisable not to summarise extensive sections of the source text. It is sufficient to summarise purposefully selected passages, the length and precision of which will vary according to need. The summarised sections should be embedded within the author's own analysis. This must be done in such a way that the reader can clearly distinguish what has been summarised, from where it has been summarised, and what constitutes the author’s own interpretation.

What is systematic analysis?

Systematic analysis is essentially a set of interconnected textual analytical methods, from which the following four levels can be distinguished: the analysis of concepts, the analysis of claims, the analysis of arguments, and the analysis of assumptions.

1. Analysis of Individual Concepts

In theological thinking, concepts are of immense importance. In the world of religions, natural concepts are often ‘baptised’, meaning they are afforded new significance. Consider, for example, the concept of baptism: In the New Testament, the meaning of baptism is described using terms borrowed from everyday life, such as birth (John 3:6), washing (Titus 3:5), clothing (Galatians 3:36), dying, and rising (Romans 6:3).

These terms evidently refer to something entirely different from, say, putting on a T-shirt or being born from one’s mother. In the Gospel of John, Nicodemus is portrayed as religiously illiterate when he clings to the natural meaning of the concept of being ‘born again’: ‘How can someone be born when they are old? Surely, they cannot enter a second time into their mother’s womb to be born!’ (John 3:4). Conversely, this confusion can also be seen as a genuine attempt at conceptual clarity, as Nicodemus poses a conceptually analytical question that is crucial for the reader’s understanding. One of theology’s first and most challenging tasks is to strive to understand what these new meanings are intended to convey. The term ‘rebirth’ or ‘being born from above’ is a prime example of this, as some

revivalist Christian movements have built their entire message around this concept.

Conceptual analysis is necessary because the history of most theological concepts is long and their content is extremely dense. Consider, for example, key concepts such as revelation, inspiration, tradition, or the Word of God. Does 'revelation' mean a doctrinal statement, God's presence, a divine experience, or a historical event? All these possibilities have been suggested, both individually and in various combinations. What is ultimately 'inspired': is it the letter of the text, the message, the writer, or the reader? Does 'tradition' signify the life of the Church, Migne's *Patrologia*, or some collection of secret knowledge, and how can one distinguish true tradition from false? Does the 'Word of God' refer to Jesus, the preaching of the gospel, the entire Bible, or only a part of it?

In conceptual analysis, the goal is to identify the key theological and philosophical concepts within a text by paying attention to the following aspects:

- **How frequently the concepts appear** (important concepts often appear frequently, whilst peripheral ones typically occur less often).
- **The emphasis given to the concepts in the text** (important concepts are emphasised, whereas peripheral ones are not).
- **What concept pairs appear in the text and their interrelationship** (e.g. Word – Jesus, Word – sermon, Word – Bible, Word – sacrament, Word – Holy Spirit).
- **Whether the concept is used in its usual or metaphorical sense** (e.g. 'The Father begets the Son').
- **How traditional theological and philosophical concepts are used**.

- **The relationship between concepts with similar meanings** (e.g. grace – atonement – redemption – justification).

Context and Tools for Concept Analysis

Context often helps to elucidate the meanings of key concepts. In concept analysis, theological and philosophical dictionaries are also used as tools. Although concept analysis may seem dull, it is an essential part of theological reflection, whether in ecclesiastical or academic theology. How can meaningful discussion occur if the content of concepts is unclear or the parties involved are using them with different meanings? The Scholastics, often accused of splitting hairs even in their own time, raised coherent theological thinking to an entirely new level by focusing on the meanings of concepts and striving to define them with sufficient clarity.

Example 1: 'Father' in the Nicene Creed

Suppose the 'Father' mentioned in the Nicene Creed refers to God's gender. A closer concept analysis reveals that the text refers to the Father as one who 'begets'. However, men do not give birth. This suggests that these words are not being used in their usual sense but that 'Father', 'begets', and 'Son' have been given a new meaning. The next step is to test this hypothesis by investigating how the verb *gennao* was used in everyday speech in antiquity. Alongside this, the question arises as to why the verb 'begets' was so important to the formulators of the creed that, even today, Christians emphatically proclaim that the Son is 'begotten, not made' (*genneethénta, ou*

poieethénta). What initially seemed like a pedantic question suddenly becomes central to the core issues of Christianity, such as who Jesus is and what salvation in Christ means.

Example 2: Justification

If the topic is justification, the researcher might ask the following questions about the text. Does the source text understand 'justification' as favour existing in God or as a power existing within the person? Does the change brought about by 'justification' primarily occur in the relationship between God and the person, or within the person themselves? Is 'justification' understood in the text relationally, so that it changes the relationship between the person and God – making God 'favourable' whilst the person remains the same? Or is it understood ontologically, so that the person themselves becomes better? Is justification a momentary declaration that occurs outside the person, or is it a process that happens gradually within them? It is clear that leaning towards the latter view leads to a very different interpretation of Christianity than the former (though combinations are possible).

2. Analysis of Individual Propositions

The purpose of analysing individual propositions is to deepen the analysis of concepts by determining what is actually being asserted in the text under examination. When analysing propositions, J. L. Austin's speech act theory can be particularly useful. According to this theory, language is not merely descriptive but can also constitute actions and produce effects. Most propositions have at least three types of significance:

- **Propositional Content (Locutionary Act):** Propositions convey specific content. This is referred to as the locutionary act of the proposition.
- **Intended Action (Illocutionary Act):** Propositions are intended to perform some action, such as describing, questioning, greeting, asserting, complaining, and so on. This is known as the illocutionary act of the proposition.
- **Intended Effect (Perlocutionary Act):** Propositions are intended to produce a certain effect in the recipient, such as strengthening belief, encouraging good actions, fostering feelings of unity, compassion, or disapproval, and so forth. This is referred to as the perlocutionary act of the proposition.

Therefore, it is important to pay attention not only to the content of the proposition but also to what it seeks to accomplish and what effects it aims to produce in the recipient. When analysing propositions, attention is also given to the following factors:

- Is the proposition presented directly in the text (explicitly) or indirectly between the lines (implicitly)?
- Is the proposition the author's own assertion, or is the author describing the views of others?
- How strong is the proposition? For example, is it polemical in relation to another thinker's assertion?
- Does the author qualify their proposition in relation to other differing perspectives?
- Does the proposition describe generally accepted facts, or is it expressing the author's own particular emphases?
- How does the proposition relate to classical theological and philosophical solutions?

Example: 'What I consider essential is the authenticity of faith, not what one believes in. Even the Bible does not compel a person to adhere to any specific doctrine, only to faith.' This statement suggests that, according to the proposition, faith is primarily about a personal attitude – what is classically defined as 'the faith by which one believes' (fides qua creditur), rather than the shared content of belief, or 'the faith which is believed' (fides quae creditur). Here, personal trust or 'faith of the heart' is separated from the content of faith, 'church doctrine', and is positioned as its direct opposite.

Following this analytical observation, the researcher could then explore all the potential problems inherent in this stance. For instance, does the source veer towards irrationalism or individualism?

3. Analysis of Argumentation

An analysis of argumentation is based on the examination of concepts and claims, and aims to deepen understanding by focusing on the justifications provided. The objective is to ascertain the nature of the argumentative structure within the text under review. It is essential to pay attention not only to individual justifications but also to the argumentation as a whole. For the analysis to be successful, one must be able to distinguish between an argument and an explanation.

An argument seeks to persuade and make a claim credible. It answers the question of what the recipient should believe and why: 'Suffering is part of life because its purpose is to make a person better.' In a broad sense, an argument does not merely refer to the justification but to the entire claim-justification structure. In this sense, an argument comprises three parts: 1) the claim, 2) its justifications, and 3) the assumptions underlying both.

In the previous argument, the claim is 'suffering is part of life.' The justification is identified by the logical words 'because' or 'as', which can be placed before the argument but are not always explicitly stated: 'because its purpose is to make a person better'. The underlying assumptions are not visible in the text but must be inferred from the context. For example, the underlying assumption of the sentence could be that the problem of suffering is difficult, that it threatens either one's faith in life or belief in God, and that an intellectually satisfying explanation must be found. Whether the argument is convincing and whether the researcher agrees with the underlying assumptions are an entirely different matter.

Conversely, an explanation seeks to clarify why something happened as it did. In the humanities, explanations are less concerned with natural phenomena and more with the reasons and motives

driving human actions. An explanation also consists of three parts: 1) the explanandum (that which is to be explained), 2) the explanans (that which explains), and 3) the underlying assumptions. For example, ‘Luther heard of the unrest in Wittenberg, so he rode into the town disguised as a knight, Junker Jörg, to quell the disturbances.’ Here, the explanandum is the phenomenon of why Luther rode to Wittenberg in disguise. The explanans is the news he received about the unrest in Wittenberg. The underlying assumption is that Luther was concerned about the situation in Wittenberg and that the news troubled him so much it led him to undertake a life-threatening mission.

In an analysis of argumentation, the following questions might be posed to the text:

- Are the claims presented based on explicit or implicit arguments?
- How are the justifications for the claims in the text documented. Are they documented at all?
- What types of arguments does the author use (e.g. statement, the Bible, tradition, experience, reason)?
- Are the arguments valid (consistency, accuracy of premises)?
- Do the individual arguments form an internally consistent chain or a comprehensive structure of argumentation?

Example: ‘What matters is how genuine the faith is, not what is believed. Even the Bible does not oblige a person to adhere to any doctrine, only to faith.’ The researcher has previously clarified that in the text, faith is understood solely as a personal attitude of trust, without any doctrinal content. Following this, the researcher can analyse the basis of this argument and assess whether the text is consistent in its reasoning. If the argumentation analysis reveals, for example, that despite everything, the text implies that faith includes

certain doctrinal or ‘theological’ prerequisites, such as belief in God’s providence or justice, then the researcher has revealed that the argumentation does not appear to be fully consistent, as the concept of ‘faith’ is still implicitly assumed to include some clearly doctrinal qualifications.

4. Analysis of Assumptions

An argument consists not only of a claim and the supporting justifications but also underlying assumptions. For example, if someone states that ‘the pastoral office is not essential to the Church (claim) because what is essential is the proclamation of the Gospel (justification)’, they clearly assume a so-called functional understanding of the office. The person presenting the argument thus appears to make the following underlying assumptions: (1) within the Christian community, only the function of proclaiming the Gospel is considered constitutive and indispensable according to divine law, (2) the performance of this task can be arranged differently in various times and places, and (3) it therefore follows that a specific pastoral office is not necessarily required to fulfil this task. Simultaneously, the person rejects the so-called constitutive understanding of the office, which views the pastoral office as divinely instituted and essential to the Church (as held by Catholic, Orthodox, Lutheran, and Anglican traditions). A more detailed analysis would likely reveal an extremely specific ecclesiological viewpoint.

The purpose of an analysis of assumptions is to determine the conceptual foundations − whether explicit or implicit − upon which the text under examination can be explained as coherently as

possible. What fundamental theological or philosophical premises and assumptions does the text rely on? Some scholars consider uncovering such underlying assumptions to be the pinnacle and highest stage of systematic analysis.

A large number of systematic theological studies aim to identify the central principle or foundation of a text, the so-called structuring principle. The goal here is to explain the author's views through some underlying (often unspoken) theological interpretation or philosophical model. In this way, individual concepts and claims become understandable in the light of the discovered structuring principle. This approach is particularly suited to thinkers or texts that clearly aim to present a comprehensive system.

In the field of the history of dogma, the analysis of assumptions can also involve the examination of historical assumptions. This includes the source criticism typical of historical research (the text's origins, author, context, purpose, literary genre, influences, and so forth). However, this approach is less common than the aforementioned analysis of fundamental theological assumptions.

In an analysis of assumptions, attention is paid to a range of aspects, including the following:

- What is the author's relationship to various theological and philosophical schools of thought (e.g. liberal Protestantism, Romanticism, Barthianism/neo-orthodoxy, neo-Thomism, evangelicalism, liberation theologies, postliberalism, etc.)?
- What conception of reality underpins the author's views? Is the ultimate reality considered to be spirit (idealism) or matter (materialism)?
- What understanding of being (ontology) underpins the author's views (e.g., realism, anti-realism, monism, dualism)?

- What epistemological assumptions are embedded in the author's views? Can knowledge, according to the author, be grounded on an undeniable foundation (foundationalism), or is knowledge always contextual (antifoundationalism)? Can rational grounds be provided for faith (evidentialism), or are faith and knowledge entirely distinct and irreconcilable (fideism)?
- What conception of God does the text reflect?
- What understanding of revelation is presupposed in the text (revelation as doctrine, presence, history, or experience)?
- What view of humanity (anthropology) does the text assume?
- How do the views presented in the text relate to classical fundamental theological questions (doctrine of God, revelation, Scripture, history, tradition, reason, faith, the concept of theology, and so on)?

The fundamental theological premises and assumptions in a text are often implicit, leaving it to the researcher to identify them. This task is challenging because the researcher is attempting to uncover something about the author which they themselves may not even be aware of. Furthermore, it is important to avoid overinterpretation in the analysis of assumptions, as not all texts contain a coherent fundamental theological or philosophical framework. In such cases, it may be more appropriate to focus on the previous level of analysis, such as examining the argumentation.

What do the terms ‘system immanence’ and ‘structuring principle’ mean?

Systematic analysis is used to examine the conceptual components of a text and their interrelationships and prerequisites. The typical objects of interest are thought patterns and conceptual systems. The components of a conceptual system are primarily concepts, and the claims made using those concepts. The term ‘systematic analysis’ denotes a research approach where a conceptual system is studied by examining and describing its components and the relationships between them.

Systematic analysis almost always focuses on some form of written material. In a typical research setting, the task is to determine thinker A’s understanding of X; for instance, Joseph Ratzinger’s understanding of divine revelation, Nikolas Cabasilas’s understanding of the Eucharist, or Maria of Normanby’s understanding of the relationship between faith and knowledge. In such cases, the material consists of A’s works or a part thereof, and the task is to reconstruct A’s understanding of X using the relevant source material (texts). To accomplish this, the material is read analytically, examining the concepts, claims, the relationships between them, the flow of arguments, the underlying assumptions within the claims and arguments, and so forth. The process of interpretation also utilises information available from the literature on the subject (monographs, articles, reference works, dictionaries, etc.).

As the process continues, the author’s thinking becomes increasingly clear. When the researcher starts to understand A’s way of thinking, they transition from merely analysing the ‘text’ to analysing the entire ‘thought’ process. To use a metaphor, the

researcher has successfully crawled inside the author's mind and is now thinking with their brain. Despite this, the researcher must maintain a critical distance from the subject. All evidence (i.e. the text) must be considered, and any issues that appear problematic should also be brought to light.

The aforementioned form of research – A's understanding of X may seem like dull 'man or woman studies'. Such a risk naturally exists. That said, every pro-seminar paper, thesis, or research article is based on some textual material, not, for example, on one's own poems. The strengths of this form lie in its methodological safety. It allows the research task and sources to be precisely defined, thereby enabling reliable investigation of a specific matter. Simultaneously, it helps avoid a situation where the researcher ends up merely presenting their own views, studying 10 individuals without properly understanding any of their thoughts, or losing sight of the research task amid a vast array of sources and thousands of themes.

Research focused on a particular figure can potentially be made more fascinating by adopting a problem-centred approach, which emphasises the theme rather than the person. In this case, a current problem is identified, and a notable thinker who has proposed an intriguing solution is selected as the source. For instance, investigating Joseph Ratzinger's understanding of revelation compels the researcher to explore what answers have generally been provided to the question of revelation within Christianity, what problems these answers have generated, and how Joseph Ratzinger might succeed in addressing them. Through the work of perhaps the most influential theologian of our time, one also gains insight into the doctrine and life of the world's largest church.

Instead of focusing on an individual thinker, one could also study various documents, such as confessional writings, doctrinal debates, liturgical texts, the canons of church councils, or other texts that

represent a communal or ‘official’ stance. In principle, it is also possible to compare different thinkers, provided the task and sources are tightly and meaningfully defined. The research could also focus on a particular correspondence, such as the letters exchanged between the Patriarch of Constantinople and the Lutheran theologians of the University of Tübingen in the sixteenth century. Alternatively, the research might examine a relatively narrow discussion on a specific topic within a defined period, such as the view of sexuality in the editorials of five women’s magazines from 1995 to 2005, or the relationship between faith and natural sciences in the latest English-language philosophical discourse on religion. The latter would likely involve analysing the intellectually challenging debate between atheist critics of religion like Richard Dawkins and Sam Harris, and defenders of the Christian tradition like Alister McGrath and Richard Swinburne.

Systematic analysis is often described as system-immanent because it aims to examine the conceptual system ‘from within’, on the text’s own terms, rather than applying external analytical tools to the material.

In addition to system-immanence, the goal of systematic analysis is often understood to be the identification of so-called structuring principles. A structuring principle refers to a fundamental solution, perspective, or interest that characterises a person’s entire thinking and explains its details. The objective is to render the subject’s thought comprehensible by identifying its structuring principle or principles.

How can an argument fail?

Analysing the argumentation present in the source text is a central component of the systematic method. However, the researcher must also strive to argue consistently and rationally in support of the interpretations made from the text. The following sentences present the most common argumentation errors. Have a go at matching the sentences to the classification of faulty arguments listed below them. After completing this task, check your responses against the correct answers (on the last page, immediately before the bibliography).

a. ‘Have you stopped beating your wife?’

b. ‘The Quran is the word of God because the Quran says so.’

c. ‘If we join the European Union, we will lose our national independence.’

d. ‘Speeding is common, so it must be allowed.’

e. ‘A Muslim terrorist killed five people; therefore, all Muslims are terrorists.’

f. ‘If Matti is a woman, he is a human. Matti is a human. Therefore, Matti is a woman.’

g. ‘Melanchthon is one of the Lutheran fathers. He believed that stars influence life. Therefore, Lutherans must believe in horoscopes.’

h. ‘Matti is ill because he has a fever.’

i. ‘There are laws of nature. All laws have a lawgiver. Someone has enacted the laws of nature, so God exists.’

j. ‘The Augsburg Confession does not mention the papacy, therefore it approves of it.’

k. ‘If Matti does not speak, he is stupid.’

l. ‘Liisa is a conservative/liberal, therefore she is wrong and her arguments do not need to be taken seriously.’

1. Logical fallacy (argumentum ad logicam)
   Problem: Based on faulty reasoning, where either the premise is incorrect, or the reasoning is illogical.
2. Ad hominem fallacy (argumentum ad hominem)
   Problem: Based on characteristics of the opponent that are irrelevant to the topic at hand.
3. Fallacy of appeal to irrelevant authority (argumentum ad verecundiam)
   Problem: Based solely on either general belief (argumentum ad populum) or an authority that is irrelevant to the subject matter.
4. Fallacy based on a lack of opposing evidence (argumentum ad ignorantiam, argumentum ex nihilo)
   Problem: Conclusions cannot automatically be drawn from a person’s or source’s silence without additional evidence.
5. Circular reasoning (petitio principii)
   Problem: The claim is justified by premises that already contain or assume the conclusion. The conclusion and the reasons are too closely related.
6. Non sequitur
   Problem: The conclusion does not follow from the premise.

7. Complex question fallacy (plurium interrogationum)
   Problem: The question is formulated in such a way that either answer would imply acceptance of the underlying assumption. The assumption should be questioned first.
8. Slippery slope fallacy
   Problem: The conclusion does not necessarily follow from the premises without additional reasoning or evidence. The conclusion and the premises are too distantly related.
9. Causal fallacy (post hoc ergo propter hoc, 'after this, therefore because of this')
   Problem: Cause and effect are confused. Regular conjunction or temporal succession is equated with a causal relationship.
10. Fallacy of hasty generalisation
    Problem: The conclusion is based on incorrect or unreasonable generalisation.
11. Naturalistic fallacy
    Problem: Moral/truth conclusions are drawn from general practices. From what is (is), it does not necessarily follow that this is how things ought to be (ought).
12. Ambiguity fallacy
    Problem: One of the key terms in the argument is used in more than one sense.

Although the above examples are generally considered fallacious arguments in logic, in many areas of life the boundaries are often not entirely clear-cut. For instance, an argument based on a slippery slope can be seen as at least understandable for certain social and ethical issues: 'I oppose the death penalty because it would eventually lead to the execution of an innocent person' or 'I do not support active euthanasia because I believe it would lead to a culture where the elderly and sick are expected to request mercy killing'.

The ad hominem fallacy is unfortunately common in academic and especially ecclesiastical discussions. The fact that someone is a conservative or a liberal – what do these terms, originally from the world of politics, even mean? – is not a valid counter-argument. Similarly, the oft-used phrase ‘that statement offends me’ is not a valid counter-argument from the perspective of logic, although it may have significance in pastoral care. An ad hominem argument might be acceptable, for example, when a person who does not understand Greek or Russian claims that the Russian translations of the Liturgy of Saint Basil the Great are Westernised or otherwise unacceptable.

It is also important to note that in a large number of theological models, philosophy and theology are distinguished from each other to such an extent that even the forms of fallacious reasoning are considered different. The relationship between logic and revelation was one of the most discussed questions in medieval philosophy and theology.

What are the different stages of conducting research?

Proper research methodology is essential both for the quality of the work and for increasing the researcher's efficiency. If the research is conducted appropriately, it saves time and effort and often improves the quality of the research. Below is one possible model of the stages involved in conducting research.

1. Familiarise yourself with the general issues surrounding the topic as well as the literature directly related to the subject. Seek advice from experts.
2. Outline the major question you aim to answer through the analysis of the material.
3. Develop a research plan. Define a preliminary task and create an initial outline.
4. Gather the sources and review them cursorily.
5. Analyse and interpret the sources. If necessary, read them multiple times. The overall results will begin to take shape.
6. Create the final outline.
7. Present the research findings in a written form that is coherent and understandable.

For research work, it is advisable to create a schedule. The time allocated for a main thesis depends, for example, on the researcher's ability to concentrate and their work habits, but also on how well the courses related to the topic have been absorbed. The thesis should ideally be completed during the seminar year. At the very least, a continuous period free from all other tasks should be reserved for stages 4-6. However, remember that a bachelor's thesis is only worth

8 credits and even a master’s thesis is only worth 40. It is not meant to be a life's work.

The portion of time needed for different stages varies depending on the research tasks. Seminars dealing with the same theme provide a general introduction to the problems and literature related to the topic. The source collection phase is usually more laborious in historical and empirical research than in systematic and exegetical research. In all cases, the majority of the available time should be reserved for stages 1, 4, and 6.

Stage 1. The aim of the first stage is to clarify the main questions, problems, and key concepts related to the topic. Alongside this, you should familiarise yourself with previous research on the topic: what has been clarified so far, what is being debated, and where do clear gaps remain? If you neglect this stage and rush straight to the sources, you may easily end up in a dead end: either you have not found a clear question or have spent six months investigating a question that was already resolved in a book published a year ago.

Stages 2 and 3. Formulating the research task and creating a work plan are essential stages, as everything that is read and written must be structured according to the research task. The prerequisite for drafting the work plan is a well-executed first stage.

Stages 4 and 5 are the actual working stages. These must be planned so that the essential primary sources are reviewed first. Such work brings various delays: issues, people, and so on encountered along the way require clarification from the literature, as a result of which you may discover new interesting sources. This stage of work tends to stretch indefinitely. However, it must be terminated at some point so that the research is eventually completed.

In stage 6, the task is to check whether a more detailed study of the sources has given you cause to alter and refine the research task and disposition. Usually, it has. Do not follow Pilate’s principle of

‘what I have written, I have written’, but instead boldly change the disposition to better match the narrative flow that arises from the sources.

Stage 7 is crucial: no matter how well you have reviewed the sources and no matter how many new insights you have gained in interpreting them, the work only gains significance once you have presented the results in a reliable and readable form. The Faculty of Theology at the University of Joensuu recommends a length of 20-30 pages for a bachelor’s thesis and 60-100 pages for a master’s thesis. A concise and to-the-point text is needed, in which everything essential is expressed and anything irrelevant is omitted. Therefore, time should be reserved to allow the finished manuscript to rest for a few days, along with the writer (but in a different place!). The second writing stage primarily involves finalising the form of the manuscript, a phase during which you should continually aim to condense and clarify the text.

It is important to stress that the above is merely a recommendation. In reality, working methods vary and often overlap. For example, it is not advisable to wait until the sixth stage to begin writing; preliminary notes and drafts can be made during the source collection phase. However, a good writer can be distinguished from a poor one by their willingness to rewrite and improve their drafts.

It is advisable to consult with your subject teachers as often as possible, particularly at the beginning of each stage of work. Be prepared to discuss the current stage, test your ideas, and ask questions. You will receive the best guidance if you have written material to present.

Technique for conducting an analysis

1. **Gathering Source Material**: Aim to compile all your materials in one place where they are always accessible. Photocopy your most important sources so that you can freely underline, make marginal notes, and add other markings. However, do not make these annotations in library books!
2. **Preliminary Review**: Skim through the primary sources to gain a general impression. Underline key points and make notes as needed.
3. **Creating a 'Rake'**: Compile a list of key concepts or concept pairs, problems, and problem areas from your source material. This forms a sort of conceptual index or concept map, which you can use to analyse the material more thoroughly. Make use of reference works and other literature to assist you.
4. **Thorough Reading and Note-Taking**: In-depth reading and making your own notes go hand in hand. Use the 'rake' you created to meticulously go through the material. Take plenty of notes. Any thoughts and questions that arise should immediately be recorded, perhaps in some sort of card index. It is also useful to make 'quotation cards' for those sections of the sources that are particularly important for your topic. Immediately record complete, precise, and accurate bibliographic details so that you do not have to search for or verify them later.
5. **Analysing the Material**: This stage has naturally already begun in steps 3 and 4. Here, the focus is on analysing the most significant details of the material. Use your notes and reference literature, alongside the sources, to assist you.

6. **Preliminary Writing**: Before the final writing, draft a relatively detailed overall plan and disposition of what you intend to write. This helps clarify the narrative thread of the text – without it, the examiner may become frustrated, which will be reflected in your grade. You do not always need to start writing from Chapter 1. The aim is to form a general understanding of how the work will progress thematically and how the various elements will fit together into a coherent whole. The disposition should be revised, supplemented, or trimmed as necessary.
7. **Editing the Written Text into its Final Form**: It is advisable to let the preliminarily written text sit for a while to gain some distance from it. This makes it easier to spot any ambiguities and poorly expressed ideas. The ideal text is 'transparent' in thought, which means that everything the author intends is written in a way the reader can clearly understand.
8. **Final Draft**: In a well-written piece of work, the language is clear and writing errors have been minimised.

What is the structure of a thesis?

All systematic theology theses should begin with an introduction and end with a conclusion or summary. The purpose of the introduction, as its name suggests, is to guide the reader into the actual thesis, summarising its subject matter, task, method, sources, literature, and structure. The conclusion provides a concise summary, briefly reiterating the research task and the course of the work, and presenting the results achieved (but without introducing anything new).

The introduction does not need to follow any specific formula; however, in practice, the author will give a credible impression of the research if the following sentence starters are included:

- ‘The task of this research is to - -’
- ‘The method employed in this research is - -’
- ‘The sources used in this research are - -’ (with justification)
- ‘Previous research has claimed that - -’
- ‘This research proceeds as follows: initially - -’

1. Introduction to the Thesis Topic

- **Introduce the question, problem, or topic** that motivates the research. Justify the research by demonstrating why the topic is significant, interesting, and timely.
- **Avoid starting from too far back** with phrases such as ‘As Plato once said - -’ or ‘The ancient Romans - -’. A good introduction can begin with a reference to contemporary issues.
- **A problem-focused introduction** is often effective. In this approach, the problem could be societal (people are grappling with this issue), ecclesiastical (the matter has prevented churches from coming closer together, etc.), or research-related (scholars have disagreed on the subject).
- **The introduction may also begin with a striking quote** related to the topic, from which the research question under consideration is then introduced.
- **Carefully considered stylistic devices are permissible**, but the general aim should be to produce good academic prose.
- **A proseminar paper can also start by stating directly what the task entails**: ‘The task of this research is to investigate - -’.
- **An academically commendable approach** often involves problematising the research history. This can be achieved by presenting two conflicting scholars or schools of thought that offer contradictory results on the issue at hand, to which the researcher then proposes a surprising solution.

2. Statement of the Task

- **A thesis must have only one task statement!** However, a single task can be broken down into multiple subtasks.
- The task statement should be brief and precise; for example: ‘The task of this thesis is to examine the shared understanding of the foundations of Christian ethics between the Anglican and Roman Catholic Churches in the document *Life in Christ* (1994)’.
- **Avoid parallel or conflicting task statements.**
- The task should correspond to the title of the thesis.
- **Keep the task in mind as you progress** through your work; do not deviate from it in any way, and do not introduce new or differing tasks during the course of the work.
- The task should be **reiterated in the same form** in the conclusion when presenting the results of the work.
- The research should **yield results**: its conclusions must clearly address the task as formulated in the beginning.

3. Method Statement

- The **method used in the thesis** is most commonly a systematic analysis.
- Typically, only **one method** is used.
- In some works, part of the thesis may involve using a historical method, followed by a systematic section. For example, the analysis of an ecumenical document is often preceded by a description of its historical background.
- In **philosophy of religion and ethics (TEF)**, the method statement is often replaced by an explanation of how the research question will be addressed.

4. Explanation of the Sources

- The sources should be **detailed and clearly defined**; their scope should be as precise as possible, and this delimitation should be justified. Vagueness indicates potential issues.
- The key material for the thesis is **primary source material**, with the rest being secondary. Whilst secondary sources can also be referenced, primary sources should be introduced in the introduction.
- The sources often consist of **textual material** from which answers to the task are sought, such as a document or the complete works (or part of the works) of a particular individual.
- In TEF, **other types of materials** may also be used as sources.

- **Source criticism should be exercised**. For example, the study of Byzantine liturgical texts requires questioning the unity and temporal layers of each text.

5. Presentation of the Research History

- In a **master's thesis** and particularly in licentiate and doctoral dissertations, key aspects of previous research history should be discussed in the introduction (though in a proseminar paper, this can be omitted; however, presenting the research history can enhance the merits of the paper).
- The thesis gains credibility if it can **problematise previous research history** by highlighting interpretative disagreements between scholars, characterising different phases or gaps in the research history, or typologising various interpretative models.
- The presentation of research history can reveal a clear gap in the research which the current study aims to fill or an obvious distortion that the research intends to correct. This helps to justify the research question of the study.
- From an extensive research history, only the **most essential or typical foundational studies** should be presented. For instance, Augustine and Luther are among the most widely studied thinkers globally, so it is unlikely that anyone could exhaustively cover their research history.
- **Research history** typically includes a variety of materials, such as monographs, articles, and reviews. The mode of publication is not decisive.
- Secondary material can be presented in **footnotes**.

6. Presentation of the Thesis Structure

- From the reader’s perspective, it is beneficial to provide a brief outline of the ‘journey’ the thesis will take at the end of the introduction, indicating the topics to be covered in each main chapter.
- It is also useful to justify why the particular structure of the work was chosen and how the research questions presented within it relate to each other.
- However, when presenting the structure, **do not reveal the results** of the work in advance; these should only be presented as the research progresses and then summarised in the conclusion.

Additional Considerations

- Familiarise yourself with **high-quality master's theses and dissertations** and compare the solutions they offer.
- Although the introduction appears first in the thesis, it is usually written in its final form **last**.

The Theological-Historical Background Chapter

Typically, a thesis includes a background chapter following the introduction which sheds light on the critical issues relevant to the topic under discussion. The primary purpose of the background chapter is to sufficiently introduce the reader to the specific problems and questions addressed in the research. It should provide the necessary contextual information, making the thematic elements of the study understandable. For example, if the research examines John Meyendorff's perspective on a particular topic, the background chapter might appropriately cover the general substance of Meyendorff's theology.

The material for the background chapter is drawn from existing, relevant, and reliable foundational research, but not from the primary sources of the research itself. The background chapter may also be theological-historical in nature, explaining the intellectual background and context crucial for understanding the research topic. For instance, if the research aims to investigate Luther’s criticism of the scholastic doctrine of transubstantiation, it is essential to explain to the reader what the doctrine of transubstantiation entails and what was said about it before Luther. Similarly, if the research seeks to examine the content of an ecumenical document, such as the concept of episcopacy in the Porvoo Declaration, it would be necessary to clarify how Lutherans and Anglicans have traditionally taught people about episcopacy and what they had previously agreed upon before the Porvoo Agreement.

The structure of the background chapter can vary depending on the research topic, and several alternative models are outlined below. These types of background chapters are rarely found in their pure form; more often than not, the chapter will incorporate elements from several of these models. It is essential to ensure that the background chapter does not become overly extensive and to focus

strictly on what is essential for the main subject of the thesis. The background chapter can take a historical and/or systematic approach.

1. Life and Works

- The phases of the individual's life under study and the key points of their theological/philosophical works are presented chronologically.
- Particular attention is paid to any changes or developments in their thinking.

2. Theological/Philosophical Environment

- The essential intellectual background necessary for understanding the topic is explained.
- Attention is given to the influences derived from the historical context of theology and philosophy.
- If reliable primary research has shown that another thinker significantly influenced the formation of the views of the person under study, this can also be presented in the background chapter.

3. Theological/Philosophical Core Views

- The individual's views on key theological/philosophical topics (e.g. anthropology, revelation, Christology, theology, epistemology, metaphysics, ontology, philosophy of language) are explained.

4. Thematic Background Chapter

- This is appropriate, for example, when the research task is not limited to examining the views of a single individual, but rather aims to elucidate the theological/philosophical background factors essential and necessary for understanding the discussion on a particular theological/philosophical issue.
- The thematic background chapter is suitable for the analysis of an ecumenical document focusing on a particular theme (e.g. the doctrine of justification)

Technical instructions for proseminar papers and master's theses

Font: Times New Roman
Font Size: 12 (in footnotes, 10)
Line Spacing: 1.5 (in footnotes, 1)
Margins: Left 4.5 cm, others 2 cm (top, bottom, right)
Alignment: Justified (recommended)
Page Numbering: Centred at the bottom (recommended)
Length: Proseminar paper (bachelor’s thesis) 20-30 pages, master's thesis 60-100 pages

Paragraph Separation: Leave a blank line between paragraphs. There should be no indentation at the beginning of a new paragraph. Use two line spaces before headings and one after. Headings should be distinguished, for example, by bold text (or small caps).

Indentations: Indent quotations longer than three lines, leaving a blank line before and after the quotation. Indented quotations should not be enclosed in quotation marks.

Emphasis: Use bold for headings. Otherwise, use italics for emphasis, but do so sparingly.

Title: The title should appear on the cover page, centred and in bold, with a font size of 20. Place the title above the centre of the page. The following information should be placed at the bottom right (with a left indentation of 7-8 cm):

003238 Bachelor's Thesis
Systematic Theology
December 2008
Molly Exampleton (student no. 123456)

Structure of the bachelor’s thesis and master's thesis

Cover Page
Contents

1. **Introduction**
    - **Motivation**: A brief introduction to the topic or problem
      [A brief presentation of the author or discussion under study]
    - **Task**: Presentation of the research topic or problem
    - **Method**: Indication of the research method and introduction to the theoretical background of the study
    - **Sources**: Introduction of the research sources (and any issues they may include)
    - **Previous Research**: Overview of prior research
    - **Structure**: A brief overview of the research process and the main chapters
2. **Main Chapter [or Historical Background Chapter]**
3. **Main Chapter**
4. **Main Chapter**
5. **Summary/Final Review**
6. **Abbreviations**
7. **Sources and Literature**

What are the assessment criteria for a thesis?

The evaluation of undergraduate theses focuses on the following aspects:

1. **Clarity and Readability of the Text**: A good text is clear (not ambiguous), fluent (not awkwardly structured), precise (not overly intricate), and unambiguous (not open to multiple interpretations). The researcher only uses concepts they themselves understand and primarily aims to assist the reader in learning, rather than merely showcasing their own knowledge.
2. **Language Quality**: A good text is grammatically correct, uses punctuation properly, and minimises distracting typographical errors.
3. **Consistency and Coherence of Content and Style**: The research progresses coherently in both content and style, making it easy – even exciting – to follow. Intriguing questions drive the narrative forward, and sharp answers provide the reader with intellectual satisfaction.
4. **Definition of the Research Task and Mastery of the Method**: The task is clearly and unambiguously defined. The researcher demonstrates mastery of the method and strives to implement it rigorously from start to finish.
5. **Compilation of Material and Familiarity with Sources**: The sources are chosen appropriately for the task and are clearly defined. The researcher is familiar with the sources and focuses on what is essential within them.
6. **Mastery of the Topic and Staying on Topic**: The researcher consistently adheres to the task they have set for

themselves. They aim to connect everything they write to the task and avoid straying on to irrelevant tangents.

7. **Justification and Explanation of Claims**: The researcher endeavours to present claims based on analysis and to justify them.
8. **Referencing Sources and Literature**: The researcher justifies their claims with sources. Footnotes document the points on which the claims are based and engage with the research literature.
9. **Introduction, Presentation, and Motivation of the Topic**: The topic is introduced in a way that justifies the research and, ideally, piques the reader's interest.
10. **Conclusion, Summary, and Findings**: The research task, sources, and progress are briefly and concisely recapped in the summary. The research yields a concrete, analysis-based result. The results are presented clearly and unambiguously.

Exercises

Task 1: Explore an extensive book review in a scientific journal (e.g. *Theological Journal*, *Science in Society*, etc.). What elements of summarisation and systematic analysis can you find in the review?

Task 2: Write a 1-3 page summary of an opinion piece/scientific article/research book.

Task 3: Expand the same summary into a systematic analysis.

Task 4: Choose an opinion piece and write a response using the methods of systematic analysis.

Task 5: Individually or in pairs, study a given bachelor's thesis and its evaluation. Determine what aspects were highlighted in the assessment.

Solutions to the exercise on fallacious arguments: a7, b5, c8, d11, e10, f1, g3, h9, i12, j4, k6, l2

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Kari E. Nurmi

SYSTEMATIC TEXT ANALYSIS

This guideline article has been published jointly on the Metodologia and Metodix pages (Where the original Finnish edition is published).

Introduction to Systematic Text Analysis

This text is intended for readers who wish to undertake a qualitative analysis of the content of texts or the philosophies or theories they contain. Its focus is on texts with systematically descriptive or theoretical content. The method presented is immanent reconstruction, which focuses on elucidating the explicit content of the text using its own concepts. Immanent reconstruction can be used either as an independent research method or for creating the theoretical foundation of an empirical section.

Keywords: systematic analysis; qualitative method; qualitative research; methodology

What is Meant by Text Analysis?

Why is Systematic Text Analysis Needed?

Systematic text analysis is needed to elucidate the messages of significant thinkers in history or contemporary theorists. However, its use should be much more common with respect to creating the theoretical foundation for empirical studies and independent theorising that continues the theoretical work of previous researchers, where analyses lay the foundation for further work. Regrettably, in these cases, it is all too common for background analyses to be merely a hasty summary or, at worst, overly reliant on the use of second-hand sources. Without delving into the content of the theories, their use cannot be effective.

The method presented in this article is immanent reconstruction, which focuses on elucidating the explicit content of the text using its own concepts. Its main area of application is the examination of theories, philosophies, ideologies, or worldviews. I emphasise common aspects of the field of text analysis to foster a discussion on possible common criteria for text analysis and to enable researchers explaining different types of texts to benefit from each other's work. I will only provide indicative aspects of other analysis options (such as deconstruction and critical analysis).

What is Meant by Text Analysis?

Text analysis can be defined as follows:

Systematic textual analysis refers to a set of methods used to study the content and form of texts, with the aim of capturing parts of the text's conceptual network, key ideas, or the overall view presented by the text.

Systematic text analysis primarily refers to an analysis of the content of a text. Its methods aim to identify the core that can be translated from one form of language or expression to another. However, it would be a mistake to assume that the content can be elucidated without paying attention to the form of the text. When the form changes, the content also changes; even seemingly minor changes in form can transform the core content of the text such that it has an entirely different meaning. A simple change in tone of voice may be sufficient, for example, to render a text ironic, often in opposition to its original objectives.

Applications of Systematic Text Analysis

- In **philosophy and theology** to study the content and structure of previously presented ideas, philosophies, theories, or parts of them, and their various interpretations.
- In **cultural studies**, such as folklore studies, literary research, film studies, and other arts studies, to describe and evaluate cultural products and practices.
- In **social sciences and applied human sciences** to elucidate existing theories and analyse texts produced in various discourses in the field.

As an educational scientist, the study of texts and their genres in my work generally relates to learning and its transmission through media. However, it should be noted that I have learnt text analysis through my studies in theology, psychology, and folklore, and subsequently in my own research. In educational sciences, the same postmodern turn towards qualitative research and texts is evident as in other social sciences (Suoranta 1995, 62), although scholarly interest in the history of education has maintained a connection to earlier traditions.

Examples of Finnish text analysis from earlier educational theories include Suortti and Tiirola's (1994) analysis of Comenius's Didactica Magna, along with Bardy's (1996) and Suortti and Mutanen's (1997) interpretations of Rousseau's Émile. Among newer educational thinkers, analytical interpretations of Jerome Bruner's (Tolska 2002), Paulo Freire's (Hannula 2001), and Jack Mezirow's (Ahteenmäki-Pelkonen 1998) ideas have been conducted in Finland.

Scientific Basis of Text Analysis

The foundational sciences of text analysis are linguistics and semiotics. The role of linguistics is readily apparent as texts are language produced in a specific form. Because much of text analysis has focused on old texts which are considered classics, the use of linguistics is generally philologically oriented towards language history rather than the structure-focused newer linguistics. By contrast, in newer research, the range of expression in the texts being analysed is rapidly changing. Various graphic techniques are taking over scientific texts, and new media almost entirely uses 'film language' with combined comic-like or video expressions. Therefore, the basis is clearly broader than conventional philology and linguistics.

Semiotics (the study of signifying expressions or signs) stands alongside linguistics and may, over time, become an even more important foundational science. From a systematic point of view, it would naturally make sense to consider linguistics a sub-area of semiotics, but historically this seems untenable. Until now, semiotics appears to have borrowed its questions and research tools from linguistics, thus positioning it as the foundation of linguistics would be premature.

Other cultural sciences, such as **cultural history, cultural anthropology, ethnology, literary studies, art history, musicology, film studies, and communication studies**, also play a role in research depending on the nature of the texts being studied.

Naturally, the content of most texts brings into the research the central aspect of the scientific field with which the content deals. For instance, the analysis of mathematical texts requires knowledge of mathematics and its history, whilst the analysis of astronomical texts requires knowledge of astronomy. Philosophy has a strong place in

text analysis, as the worldview of the text remains a crucial aspect for its understanding. In structuring the rhetoric of the text, the framework of argumentation is often central, and most examinations require making visible and verifying the internal logical reasoning structure of the text using formal calculus.

From the perspective of research problems, systematic analysis can also be divided into complementary sub-areas. The common division, which does not necessarily correspond well to the division of studies, is the division into isagogics, exegesis, interpretation history, and hermeneutics.

- **Isagogics** (introductory study): research focused on the origin, form, genre, translations, and media variations of the text.
- **Exegesis** (explanatory study): research on meanings connected to the original social contexts of the text.
- **Interpretation history**: research on usage contexts and the conditions and consequences of changes in interpretation.
- **Hermeneutics**: research on the current meanings of the text.

Such a distinction is, certainly, artificial but reminds the researcher that, in addition to the questions they are currently investigating, it is also worth seeking answers to other kinds of questions – and likely someone is already researching them.

Texts as a level of language have three aspects:

- **Narrative (narrative)**
- **Systematic (systematic)**
- **Poetic (rhetorical-poetic)**

The narrative and systematic aspects are determined by the cognitive function of language, which is that language expresses thoughts. Narrative language conveys a story about what may have happened before, can happen now, or may happen in the future in our world or, alternatively, in some other world. Systematic language conveys either detailed lists of everything in the world or general principles that regulate the relationships between objects in the world and between objects and states of affairs. A text where the narrative aspect is dominant can still contain extensive systematic sections, and vice versa.

What is a Text?

A text is defined as follows:

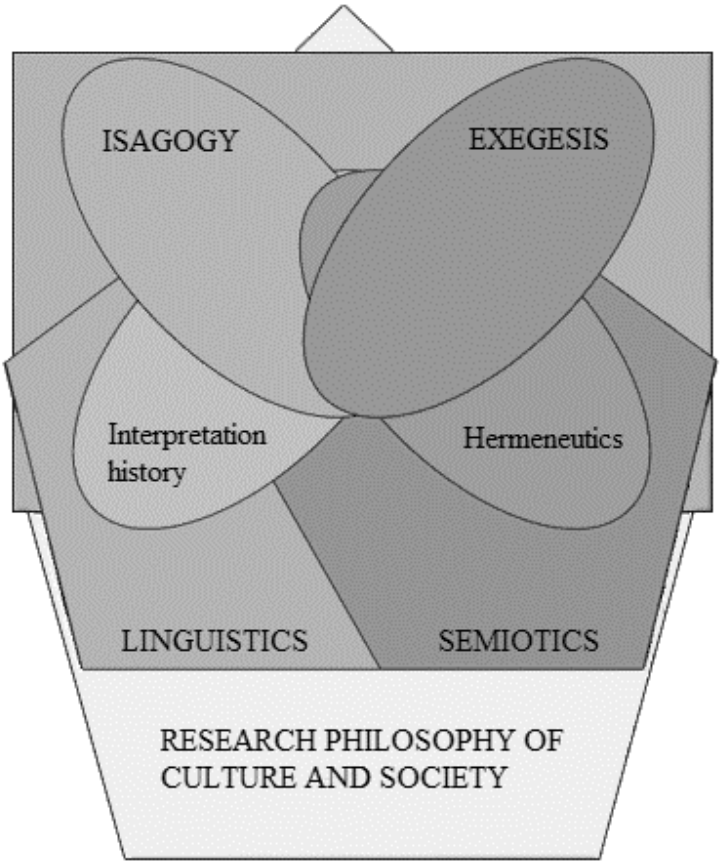
All those experiences of expression through which the creator consciously seeks to convey their own, others', or randomly generated thoughts to others (those nearby, viewers, listeners, readers, tasters, bodily sensation experiencers, or other perceivers).

The term ‘whole’ in the definition does not mean that an expression must be somehow complete to be a text, but rather that a text refers to a broader production, a collection of related expressions. At its smallest, a text can be concise or even empty if it reserves the place of a typical text in communication so that the interpreter understands the absence of expressions to be intentional.

Communication thus refers to a flow of texts in which a typical recipient can be expected to recognise a text as a text. However, the boundaries of texts are often fuzzy, which means that the recipient and even the author can be mistaken about their actual boundaries; intended boundaries do not always form actual boundaries.

With respect to examples of different texts, the general concept of a 'text' is, in practical terms, too broad. Printed books are texts – even when a ‘poetry book’ has been created containing only blank pages. The absence of text can, in such a case, be a meaningful text in itself – although we would not (yet) consider an empty diary sold in the same bookstore as such. Typical, frequently analysed texts are

philosophical and scientific works, novels and short stories, poems, plays, radio programme scripts, texts composed of images, sound, verbal parts of films and TV and video programmes, and personal documents, including photographs and similar. A fully comprehensive list is impossible to present.



Background Paradigms of Text Analysis

Paradigm Concept

Since the Second World War, research has been viewed not as a model of the gradual refinement of theories, research methods, and the accelerating growth of scientific results, but as a series of conflicting and incompatible worldviews. Research is propelled forward more by revolutionary disagreements and conflicting views than by increasingly accurate and relevant knowledge.

A paradigm refers to a relatively cohesive set of theories, research practices, and consequently compatible research results, based on a shared worldview regarding the task of the scientific field.

As a scientific term, the term ‘paradigm’ originally meant a grammatical inflection pattern, a set of alternatives forming a coherent system that are, in principle, mutually exclusive: only one of the inflection forms gives the word its intended meaning. The philosophical concept of a paradigm presented by Thomas S. Kuhn is far removed from this origin. In some sense, however, it has been quite apt as it has been broadly expanded beyond the examination of scientific 'revolutions' and the differences between schools of thought so that, today, we discuss the 'paradigms' of almost any

social practices. Revolutions in thinking and action occur in other areas of society even more frequently than in the sciences.

It can reasonably be asked whether significant, revolutionary paradigm shifts have occurred in text research, particularly from a theoretical and research results perspective. At first glance, the answer is negative. Text analysis has been conducted in various ways since ancient times on all inhabited continents. The differences in results have clearly been more ideological than scientific. The analyst's own preferred ideology or theory has often prevailed over competing thought models, with the argument often relying more on force and effort than on the logical validity of reasoning. From this perspective, it can be said that systematic text analysis is not the exclusive property of any particular scientific or ideological paradigm: it is utilised by both theologians and natural scientists, by conservative humanists as well as revolutionary anarchist and Marxist thinkers.

The results are often more reflective of the subject than of any particular paradigm, which is undoubtedly appropriate. Researchers of Plato have their own tradition, as do researchers of Aristotle, and these differ significantly from studies focused, for example, on Wittgenstein's philosophy. The analytical personality theories and therapeutic practices of Sigmund Freud and Carl Gustav Jung, which have greatly influenced text analysis, are not easily classified within any prevailing paradigm. Numerous feminist text researchers (such as Judith Butler and Julia Kristeva) have utilised these traditions, often in forms mediated by Jacques Lacan. Due to their medical origins, these approaches come close to positivism, but because of their transcendental interpretive methods they are almost the opposite of the historical-positivist interpretive approach.

However, the hermeneutic-phenomenological research approach has gained ground over the last century, even though practical analyses often form their own micro-paradigms based on the subject

matter. Sometimes, these studies are strikingly reflective of their subjects.

Paradigms of Text Analysis

I categorise the background paradigms of analysis into four groups: hermeneutic-phenomenological, positivist, critical, and postmodern. I will elaborate slightly more on the hermeneutic-phenomenological research approach and then briefly relate other paradigms to this.

Hermeneutic-Phenomenological Research Approach

Hermeneutics refers to the interpretation of texts, methods for which were developed as early as ancient times. Its foundation lies in the study of language, which yielded significant results in the dawn of science. Notably, the Sanskrit grammar of the Indian scholar Panini established a precise, rule-based interpretation of language even before the birth of European linguistics.

One of the insights derived from the medieval scholastic synthesis of Neoplatonism and Neo-Aristotelianism is that adding new signs to a text also generates new meanings. This is evident when translating texts from one medium to another; for example, from written text to video text. The expressive surface of the text and its content are interconnected; one could even say that, in addition to the text itself, the surrounding texts (i.e. the discursive context of the text) determine its meaning.

For instance, it is difficult to understand the irony of a text without any knowledge of its non-ironic neighbouring texts. New works are born from old ones. Intertextual references are extremely common and often unnoticed. Western texts are replete with references to the Bible, Islamic texts to the Quran, Indian texts to Vedic literature and epic mythologies, and so on.

The most well-known tool of hermeneutics is the so-called hermeneutic circle, a cyclical interpretative method. When applying this method, prior knowledge of the text forms a pre-understanding which new research aims to deepen. Each new research cycle attempts to refute hypotheses based on pre-understanding whilst simultaneously identifying new interpretative grounds that form new understandings.

The philosophical foundation of modern hermeneutics was primarily formulated by German scholars, most notably theologian Friedrich Schleiermacher (1768-1834) and philosopher Wilhelm Dilthey (1833-1911) (Dilthey 1979). The fundamental concept of hermeneutics is understanding, which encompasses both the practical understanding evident in everyday life and rule-based scientific understanding. Understanding the foreign is always based on self-understanding derived from one's own experiential world. According to Dilthey, the logically derived developments of science are also based on experiential interaction. American pragmatism and, most notably, French research in the twentieth century, particularly semiotics (Charles Sanders Peirce, 1839-1914) and structuralism (Ferdinand de Saussure, 1857-1913) have strongly influenced the latest hermeneutics.

Phenomenology renewed the tradition of understanding research. Its precursor emerged in the eighteenth century within the natural sciences (Johann Lambert's Neues Organon 1746). Its central ideas were formulated by Franz Brentano and, in particular, his student

Edmund Husserl (1859-1938) from material provided by Kant and Hegel.

Awareness is based on the lifeworld, which is not composed solely of factual states but also of values, goods, and practices. The people around us are not merely objects of theoretical scrutiny but friends, enemies, superiors, or subordinates, relatives, or strangers. Research must establish methodological rules that align with the self-evidence and primacy of the lifeworld. This often leads in later hermeneutics to a juxtaposition of the lifeworld and the system world, where many texts under study represent more artificial illusions that testify to and legitimize the existence of social systems rather than the lifeworld itself.

Alfred Schütz, in his phenomenological sociology, combined Husserl's fundamental ideas with Max Weber's interpretive sociology, which partially relied on text analysis, through the concepts of social action and meaningfulness. Maurice Merleau-Ponty integrated these ideas into a perception-psychological philosophy emphasising human corporeality. The latter has, in turn, influenced philosophical interpretations of cinema. Phenomenology also has a close relationship with existentialism. Some of the most significant interpreters of philosophical and religious texts from this foundation are Rudolf Bultmann, Martin Heidegger, Karl Jaspers, Emmanuel Lévinas, and Gabriel Marcel.

Positivist Research Approach

The ideals of natural scientific research also inspired Auguste Comte (1798-1857) to transfer the methodology known as positivism, which aims for verifiable (and thus positive) facts, to sociology. In the social sciences, positivism has not led to significant applications in systematic text analysis. The tradition of quantitative content analysis, which emerged from this inspired tradition, is characterised by a focus on the surface-level contents of the text rather than precise details, allowing statistical analysis to be automated by computers.

Positivism has had an impact in two ways. Firstly, it has emphasised the importance of the logical and mathematical formulation of theories and has thoroughly examined previously proposed theories in order to strive for precision. Through this, it almost converges with Anglo-Saxon analytical philosophy and touches upon ideas that, based on Wittgenstein's philosophy of language, are also thoroughly scrutinised as texts. The systematic analysis developed by K. B. Madsen (1969, 1975, and 1977) for comparing psychological motivation theories is closer to the positivist than the phenomenological paradigm. The logical calculus of set theory and formal language theory serves systematic text analysis well in its own right.

Secondly, positivist historical research has strongly emphasised source fidelity and adherence to the interpretation of the appearance of sources without speculatively filling in the gaps in the materials. Although positivism seems to have somewhat receded in recent years, at least in the social sciences, it is not impossible to conceive that post-positivism, through the automatic processing of texts, may provide new tools for the development of text research in the future.

Critical Research Approach

Karl Marx (1818-1883) and his collaborator Friedrich Engels (1820-1895) developed a communist social theory for the international labour movement that emphasised the distinction between the capitalist owning class and the oppressed working class. Its original foundation was Marx's text analysis of ancient materialist philosophy in his doctoral dissertation. The theory advocated a socialist view of societal progress. In conjunction with this, Marx and Engels' writing style was highly critical of both the prevailing state of society and the thinkers addressing these issues. In their work ‘Die heilige Familie’ (The Holy Family), they thoroughly and robustly critique the entire contemporary German philosophy as a failure. This critical writing style created a genre that later communist writers continued, and it seems to have been inherited, albeit in a much milder form, in the form of the critical paradigm.

Developed as a counterbalance to National Socialist ideology by the Frankfurt School (Theodor Adorno (1903-1969), Walter Benjamin (1892-1940), Erich Fromm (1900-1980), Max Horkheimer (1895-1973), and Herbert Marcuse (1898-1979), the critical paradigm is a distinct research orientation in the social sciences. It combines elements of Marxism and psychoanalysis, its aim being to understand the phenomena under study as the product of conflicting psychological tendencies and social contradictions. In the Marxist tradition, critical theory is emancipatory – in Marx's words, it aims not only to explain but also to change.

The importance of the critical paradigm is underscored by the fact that psychoanalytical text analysis has continuously revealed essential and surprising aspects of texts. Likewise, the emphasis on examining the social status and significance of a text has long been a self-evident aspect of hermeneutics. The critical paradigm offers a

broad theoretical framework for such naïve psychological-social criticism. It is evident, for example, in Jürgen Habermas' (1926-) conception of knowledge interests, the theory of communicative action, and discourse ethics.

Postmodern Research Approach

The postmodern research approach lies at the boundary between science and art. Its foundations include phenomenology, Freud's and Jung's analysis of the subconscious, and, in part, the critical paradigm. Its main principles are:

- Abandoning the assumption of the systemic unity of the phenomenon under investigation.
- Abandoning the notion of one theoretical explanation being more correct than others.
- Seeking new metaphors to view the matters examined from a fresh perspective and transformation based on translating from one sensory or artistic form to another (e.g. ironisation).

These have clear connections to Dadaism and Surrealism. In text research, this approach emphasises the role of oppositions that form the ideological basis of the text and elucidate its meaning.

Key figures of the postmodern paradigm include the philosopher Jacques Derrida (1930-2004), the literary critic Paul de Man (1919-1983), and the sociologist Michel Foucault (1926-1984). Derrida's linguistic insights, engaging text analyses, critique of logocentrism, and strong science politics have both garnered admiration and

sparked attacks against postmodernism, sometimes referred to as science wars. The research method called deconstruction, associated with Derrida, is explained very briefly in the second part of the following section.

Executing Options for Text Analysis

Unconstrained by a guiding paradigm, systematic text analysis can emphasise various aspects. These aspects and their alternatives are highlighted to varying extents in different paradigms. The approach and outcomes of the analysis depend on how the choices regarding these aspects are made. No alternative is right or wrong, but it is crucial for the researcher to make these choices consciously and to follow the chosen approach consistently. Below, I discuss six key pairs of alternatives.

1. Immanent versus Transcendent

Analysis is immanent if its interpretations adhere to the language and conceptual or theoretical content of the texts themselves, and transcendent if interpretations employ language that deviates from the texts under analysis, concepts foreign to the text, or theories chosen from other literature.

Hermeneutic-phenomenological analyses are often textually immanent, whereas positivist and critical analyses are frequently theory-driven and transcendent. Commonly applied transcendent frameworks include, for instance, psychoanalytic and Jungian theories, theories of metaphor in poetics, and theories of rhetoric and dramaturgy. These can, certainly, be used immanently when the texts being analysed are already based on the respective theory.

2. Reconstructive vs. Deconstructive

Analysis is reconstructive if it aims to state only what is already expressed in the text being analysed, and deconstructive if it seeks to bring out elements that are not part of the text's explicit content, but rather need to be read ‘between the lines’.

Reconstruction might not seem to reveal anything fundamentally new. However, texts almost always contain structures and details that do not readily become apparent when reading or which require special expertise or sharp insight to understand. Although reconstructive analysis is, in a sense, a repetition of the text, it can still be useful in, for example, highlighting a surprising aspect for examination. Successful text analysis requires an initial careful reconstruction, the aim being to understand as thoroughly as possible what the author of the text intended to convey. This requires congeniality from the interpreter, meaning some form of like-mindedness or at least a serious attempt to achieve this. If the interpreter doubts the author's motives or starts by critically evaluating the text, essential points may be missed and the interpretation often misrepresents the author's intentions.

Deconstruction is a philosophical research method based on the work of the French thinker Jacques Derrida and is heavily influenced by phenomenological thinking. It is based on the notion of the layered nature of human action: thought does not occur through logical progression and the rational acceptance of the best alternative, but by oscillating between opposites. The propagated idea often serves to rationalise the suppression of the opposing view.

In deconstructive analysis, the deep-level oppositions or binary oppositions of the text are utilised. It is not so much about seeking logical contradictions as it is about finding and interpreting the sometimes obvious, sometimes indirect opposing structures of

meaning in the text by changing the perspective. The techniques for achieving this are as follows:

1. Examine the text by accepting its propagated explicit message.
2. Change the perspective and interpret the text by assuming that the opposed or unspoken opposite view is true. Based on the resulting insights, return to the previous stance and see if the text can now be understood more deeply.
3. And so on – the perspective is switched from one side of the opposition pair to the other for as many times as new meanings emerge.

If there are several pairs of oppositions, all those relevant to the research topic are examined.

3. Classificatory vs. Interpretative

Analysis is classificatory if it aims to place the matters presented in the text into broader categories and examine them as examples of such categories. Although classification does not necessarily require it, classificatory analyses are often used as a basis for comparing two or more texts. In doing so, it easily conveys the mindset of the preferred text, whilst ignoring the fact that other texts do not fully fit into it.

Analysis is interpretative if it strictly adheres to the language and conceptual framework of each individual text, seeking explanations only within their own natural contexts. The discursive context can, certainly, be used in interpretative analysis to support the understanding of the text's intentions and new expressions or meanings. For possible comparisons, a neutral and balanced comparative language is created. An example of this is the use of set theory constructions in the comparison of theories.

4. Understanding vs. Critical

Analysis is understanding if the researcher, at least initially, accepts the ideas presented, even if they contradict their own views. It is natural for texts from unfamiliar environments to initially seem absurd. This is often a genre issue: the reader cannot discern the genre to which the text belongs, making its content seem alien. This alienness dissipates with a thorough acquaintance with the text's discursive environment and by learning to recognise its nuances. By studying the culture to which the text belongs, one can come to

understand it. However, this requires a degree of like-mindedness, or congeniality.

Critical analysis is based on a different intention than understanding. In this process, the researcher conveys their reactions to the text to the author or other users. The purpose of critical analysis is often to make readers aware of the text's substantive or formal strengths and weaknesses. Criticism can either be process feedback aimed at influencing new versions of the text or future texts, or a reception discussion aimed more at influencing other users of the text or expressing a contemporary judgement. Criticism presented without congeniality hardly functions as a conversation, but it still has the capacity to reveal not only critics' views but also the deep-level oppositions the text evokes in its users.

5. Emphasising Uniqueness vs. Comparison

Analysis emphasises uniqueness if each one of the group of texts being studied is examined separately, especially if apart from all other texts outside their group. It is comparative if the characteristics of the text are constantly related to other texts.

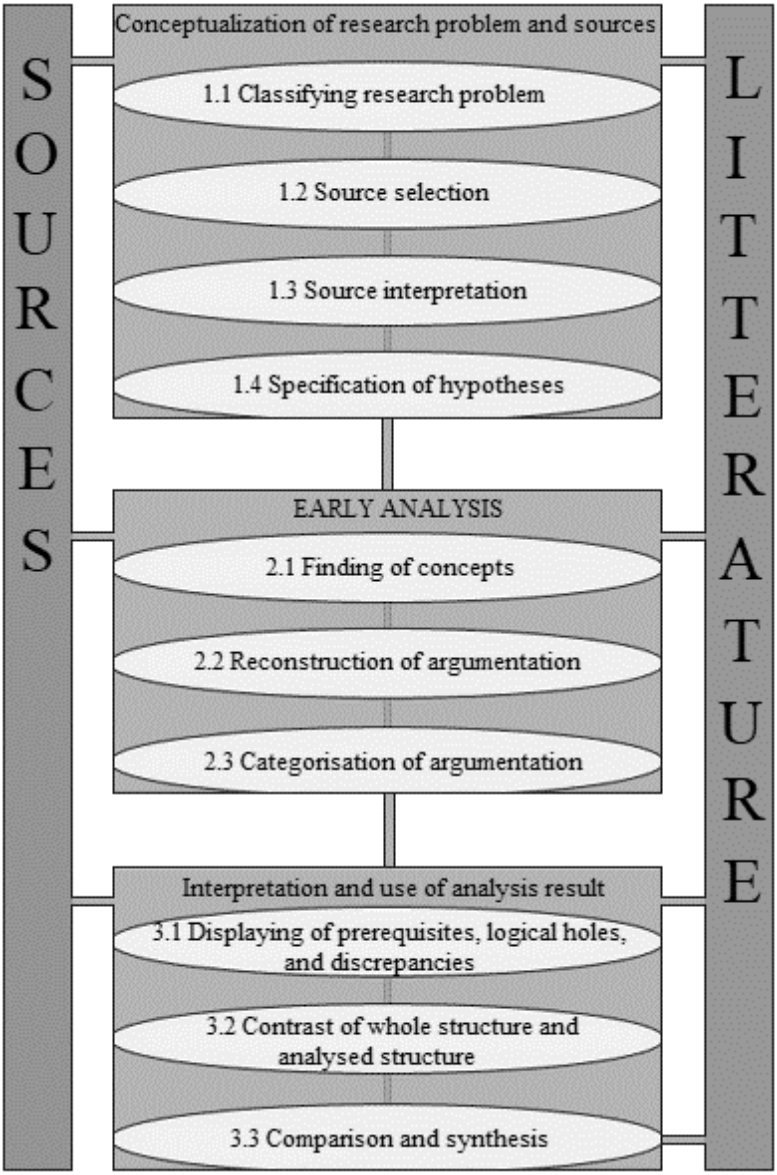
The problem with comparison is that classification easily leads to a transcendent approach. This does not inherently hinder the analysis if the transcendent method is chosen consciously and followed consistently. The situation changes if one of the texts being compared is closer to the researcher's own mindset than the other texts, resulting in the researcher unknowingly leaning more on its language than on the conceptualisations offered by the other texts.

The choice between emphasising uniqueness and comparison is also a matter of scope. Even when studying texts by a single author,

it is reasonable to ask when they should be included in the same analysis. If there are clear periods in the author's work during which their views have changed, it might initially make sense to stick to texts from the same period. Comparing ideas from different periods requires that each period is first clarified from its own unique starting points. From this, a clear methodological rule follows for comparison: texts from different periods should generally not be compared unless there is an exceptional overlap, such as developing the same theory further from the premises set out in an earlier text.

6. Inductive vs. Deductive

Analysis is inductive if it starts by picking out aspects from the texts as they emerge, and deductive if it adopts a logical or overall mathematical model, either from within the text or from external theories, as the starting point for the analysis. Immanent analyses are often inductive, but transcendent analyses do not necessarily have to be deductive. Logic and mathematics do not need to be inherently considered as theories that make an analysis transcendent, except when the analysis specifically focuses on logical or mathematical texts. Every text has its own internal logic, which can be intentionally contradictory, but commonly used logical formulas (such as set theory, predicate logic, propositional calculus, and similar fuzzy developments) can be used in immanent and inductive research to highlight the structure of the logic followed.


SOURCES
LITTERATURE
Conceptualization of research problem and sources
1.1 Classifying research problem
1.2 Source selection
1.3 Source interpretation
1.4 Specification of hypotheses
EARLY ANALYSIS
2.1 Finding of concepts
2.2 Reconstruction of argumentation
2.3 Categorisation of argumentation
Interpretation and use of analysis result
3.1 Displaying of prerequisites, logical holes, and discrepancies
3.2 Contrast of whole structure and analysed structure
3.3 Comparison and synthesis

Immanent Reconstruction

Progression of Analysis

The process of conducting research is usually structured as a question-and-answer game between the researcher and the subject material. The researcher poses questions, evaluates potential answers based on previous studies and their preliminary understanding of the material, and then analyses the material to verify which answers are possible and which are likely to be incorrect.

The process of verifying answers often reveals that the original questions were poorly framed, cannot be answered based on the material, or that the proposed answers do not fit the texts. This leads to the generation of new questions and new potential answers. Analysis generally proceeds through the following phases, although progression does not have to follow this exact order and often requires revisiting earlier phases. However, it is advisable to plan a fairly precise sequence for one's own research progression, as producing results for others to read is essential – public discussion is a crucial element of text-analytical research.

Structuring the Research Problem

Systematic text analyses are conducted to elucidate previously expressed ideas. 'Previously' is a broad term that can refer to the earliest surviving expressions (such as Stone Age cave paintings, Sumerian cuneiform, Egyptian hieroglyphic texts, or Chinese oracle inscriptions) as well as very recent discussions, including audio or video recordings. In theory, there is an infinite number of potential research topics.

A problem falls within the scope of systematic text analysis if it concerns the intellectual content of a text or the formal aspects intrinsically related to this content. Systematic text analysis can also be used as an auxiliary method. This is extremely common in historical research and comparative cultural studies, but it is also needed in other forms of psychological and social scientific empirical research.

When applying a scientific theory, a researcher must be self-critical, recognising that their understanding of its content might be incomplete. The intellectual content of a theory must be thoroughly understood before its application and further development can be meaningful. Therefore, every study based on a previous theory essentially begins with a systematic analysis of that theory.

The research idea must be delimited substantively, temporally, and in terms of the thinkers and their texts, according to the constraints imposed by research resources. In theses, it is usually practical to focus on a single thinker whose works are studied and around whose central idea the research is built. Even when studying a group, organisation, school of thought, or other broader entity, each text must initially be examined from its own perspective as if it were the sole focus of the research. Comparison requires a thorough understanding of the texts being compared.

The ideation of a research problem is always based on previous research on the subject. When planning research, it is important to read as extensively as possible studies conducted on the same topic. Every new study makes a contribution to the ongoing conversation about the subject, and it is essential for the researcher to consider what others have said. However, it is advisable to document one's research idea as early as possible, as reading the literature often results in the original, unique perspective being forgotten. This can easily dilute the work, leading the researcher to discuss the topic only on others' terms, which is not the purpose of engaging with the literature. A good research idea is one that opens up new research possibilities. Such an idea is central to the topic but not all-encompassing. It can either continue an ongoing discussion or initiate an entirely new one.

Previous research often provides hypotheses, along with plausible solutions to research problems. A researcher starting a completely new line of research must grapple with the challenge of formulating sensible problems. Even in text analysis, the researcher usually forms interpretative hypotheses as the basis of their analysis at a fairly early stage. The purpose of these **hypotheses, or preliminary assumptions about the research outcomes**, is to clarify the research process and enable the researcher to realise what they have actually learnt.

The goal of the ideation phase is to progress to a project proposal, which is then formulated into a written research plan. Such a description, anticipating the execution of the research, is vital in the discussions required to implement the research. It is a negotiation tool used to engage the research supervisor, collaborators, and funders in the implementation of the research. Naturally, the plan evolves throughout the research.

Text Selection

Limiting the set of texts to be examined is usually quite straightforward, but the final selection is often challenging. At the very least, the researcher must address the following questions:

- What is the set of texts, the text corpus, to which the texts under analysis belong?
- What are the boundaries of the texts; where does each text under analysis begin and where does it end?
- What is the core of the text corpus, given the issues under investigation?
- Which parallel versions and their parts are to be analysed?

What is the scope of the texts?

If the problems concern the views expressed by an individual thinker or actor, or the works of an artist, the author's production defines the corpus from which the texts under investigation are selected. If the focus is on a pair or group, the delimitation becomes more difficult. In principle, it may be clear that only common works belong to the corpus. However, in practice, it is not always easy to determine which texts are truly common, and if collaboration has been ongoing for a long time, such restriction loses its significance.

For example, based on such grounds, the works of Engels and Marx have been considered as one corpus, especially within the communist movement, even though the common works constitute only a part of the whole. This decision is supported by Engels'

significant role in editing some of Marx's unfinished works. However, it is quite likely that such comprehensive identification leads to decisively erroneous conclusions in some matters. In the case of Marx, the over-expansion of the corpus has, at least in Leninist communism, resulted in the understanding of his ideas as a complete, unified system. Nevertheless, most of Marx's works remained unfinished during his lifetime, and despite the consistency of his worldview, he continued to develop his theories until the end. The collective interpretation of the Communist Party has transformed the understanding of the theories several times in the twentieth century, even from content finalised by Engels, such that a significant part of the content of Leninist Marxism must be viewed as thought foreign to Marx himself.

What are the boundaries of the texts?

In the second stage of selection, it becomes necessary to infer which texts are so crucial for the subject under investigation that they must be subjected to detailed examination. This is the researcher's most important decision, so it must be resolved unambiguously, and adequate justifications must be provided. Natural justifications include the significance of core texts for the issues under investigation and their comprehensiveness in presenting aspects within the corpus. It would not be appropriate to select texts for examination that present only an unrepresentative portion of their authors' views. An exception to this is when there is clear periodicity in the authors' production. Examples of this include Wittgenstein's early philosophy and his later works. In such cases, it is not only acceptable but even desirable to initially study each period

separately, from its own starting points, and only then address issues related to changes in views. During the course of the research, the relationship between the corpus and the primary sources regarding the subject should be flexible. The researcher should also be aware of aspects contained in those works that have primarily remained outside the scope of the investigation; thus, the core of the primary sources may need to be redefined as the research progresses.

Which alternative versions and their parts are primarily intended for analysis?

In addition to defining the corpus and core, researchers often need to consider which version of the works to primarily analyse. Various drafts, manuscripts, and editions of works may exist that differ both in form and content. Additionally, there are translations and adaptations into other media languages. Oral tradition typically manifests in numerous variations and combinations. Films and video programmes often have synopses, scripts, storyboards, countless still shots, multiple semi-edited versions, and possibly different length versions for distribution. When transferring work made for cinema to television format, part of the visual information is typically lost to some degree.

Depending on the research question, the extent to which such variations are considered in the study and which alternative is chosen for analysis may vary. The first rule is always to use the original language text in research, if available. There must be a specific reason for using a translation – the researcher's inadequate language skills are not sufficient justification. In the absence of language proficiency, an assistant proficient in the language may be used.

Translations should be checked by at least one other expert, as errors or omissions can easily occur. A valid reason for examining translations would be to explore aspects related to translation history or to seek support for issues related to a contemporary understanding of the language.

A typical example of the aforementioned difficulties is the selection of the core text in Aino Hannula's (2000) study on Paulo Freire's adult education theory. The work deals with Freire's main work, ‘Pedagogy of the Oppressed’. In principle, the original Portuguese version of the book would, certainly, be the only ‘correct’ subject of analysis. However, in practice, the existing Portuguese publication is, ironically, a translation from the English edition of the book, and the original text no longer exists. In the absence of a critical scholarly textual edition, the researcher in this situation used both the English and Portuguese editions side by side.

Interpretation of Texts

Texts must be understood or interpreted linguistically so that the researcher knows the intentions and meanings of all expressions used. As a bare minimum, the following questions should be addressed:

- What is the genre of the text and what is its own tradition of origin?
- What is the position of the text within the discourse, what are the preceding texts to which it responds, and what are the subsequent texts that, in turn, respond to the text?

In principle, the researcher must clarify the textual genesis, genres, intertextual references, editing and possible publication, as well as reception history. For the oldest texts, one can usually rely on previous research. However, for newer texts, the task is often overwhelming because it would require a separate, multifaceted study. In such cases, the researcher must assess how thorough an investigation is necessary for their research question and integrate the work into the main study to ensure that neither aspect is neglected.

Refining Hypotheses

The research problem should be refined into clear questions or hypotheses that can be evaluated using the available data to provide a reasoned answer. The questions may concern either the concepts used, the assertions made in so doing, or the overall idea conveyed in the text. The choice depends on the position of the research within the research tradition. When opening up a new research topic, it is common to present comprehensive systematisations covering the entire ideological spectrum. However, this is more of a textbook-like presentation than actual research. Sustainable results are achieved only when applying a truly analytical approach that progresses through the details. In any case, it is important to pose real, non-trivial questions where one's own or others' preconceptions may also turn out to be incorrect.

Regarding hypotheses, there are two different approaches to choose from. Sometimes research naturally starts from an existing preconception, perhaps reached as a result of previous research. The validity of this then needs to be checked with a new analysis, possibly using additional material. Interpretation traditions also develop as research progresses. Each detail begins to have one or more established interpretations or at least hypotheses, whilst radical reinterpretations may also be proposed.

The number of hypotheses may grow so large that they prevent the researcher rom reading the texts with an open mind. It is important to remember that hypotheses in textual analysis differ significantly from hypotheses in experimental and quasi-experimental research. In the latter, hypotheses are always tested using new data, so that attempting to verify a hypothesis does not automatically produce the same result as previous attempts. In textual analysis, interpretation hypotheses often rely on the same data

that were used to examine their validity. Thus, the researcher must be extremely careful, open, and consistent if they are to detect errors in their hypotheses.

Sometimes it is practically necessary to choose the other path: to forget the entire structure of previous hypotheses and attempt to read the texts as if they were new, previously unknown material. This is usually made possible by selecting analysis methods that have not been used in previous research.

Performing Textual Analysis

I begin by assuming that the thought system contained in the text is built on concepts, the relationships between which form propositions (sentences) connecting them. The analysed text or set of texts is a presentation of the thought structure formed by these propositions. Therefore, the analysis can be approached at the level of concepts, propositions, or the thought system presented in the text (theory, description, etc.).

Identifying Concepts

Concepts are the text's way of categorising things. In every text, a few concepts are crucial for its content. Sometimes, there is clearly one central concept around which the text is written. However, concepts are more central in systematic texts than in narratives.

Systematic texts often present concepts at a general level, making them easy to identify. Narrative texts, by contrast, often approach concepts through concrete examples, where the entities referred to by the concepts encounter the characters in the story as the narrative progresses. A concept is easy to identify if the author names and defines it. The name used for the concept, its corresponding term, enables the researcher to find other parts related to the same concept. However, one cannot rely on the author using the same term for the concept every time. This would break the internal norm of language, which restricts the repetition of the same word too many times in consecutive sentences. Therefore, it is common for concepts in texts other than completely formal ones to have parallel terms that the

researcher must identify. Regrettably, parallel terms may also include various nuances of meaning, which requires the researcher to pay careful attention to detail. The ‘search text’ command can be used to find term candidates for concepts, if good ones exist. In the absence of these, a concordance program can be used which searches the text for all words, arranges them alphabetically, and prints them with their contexts, marked with occurrence location data. The problem with using a concordance program is that the keyword dictionary it produces is much broader than the original text.

Key terms in systematic texts are often defined at least implicitly, making it easy to identify concepts and to expect them to be treated consistently. The identification of concepts is also facilitated by the fact that concepts form cohesive systems. Their members are related to each other, usually forming hierarchies of superordinate and subordinate concepts.

However, the meaning of a concept is ultimately determined by its usage, not definitions. Usage is often significantly narrower or broader than one might assume because the use of everyday language does not follow the details of definitions as is the case in mathematics. Examples illustrate usage, and by carefully following these, changes or inconsistencies in concepts between texts, and sometimes even within the same text, can be identified. It is advisable to create a preliminary concept map displaying the classifications of concepts and their hierarchies, and to mark the most important text references (Novak & Gowin 1984).

Reconstructing Statements

Let us examine the following text:

> ‘The dimension of rote **learning** – meaningful **learning** is separate from the dimension of reception-based **teaching** – invention-based teaching. Both reception-based and invention-based **teaching** can lead to either rote learning **or** meaningful learning. It is necessary for school learning to help students transition to higher levels of meaningful learning, especially in reception-based teaching, which is the most common.’ *(Novak 1997, 11.)*

This text contains several concepts, but the four most important are rote learning, meaningful learning, reception-based teaching, and invention-based teaching. The text presents the relationships between the concepts in such a way that rote learning and meaningful learning are understood as dimensions, and reception-based teaching and invention-based teaching are seen as opposite ends of another dimension. Because the former are explicitly given in the text, they can be considered as forming the definition of the concept system.

Definitions, in a way, are also propositions or statements, but because of their position in the text, they are not usually considered true or false; rather, they provide the basis for examining the validity of the propositions. Definitions indicate how terms are used in the text, so instead of discussing their truthfulness, one can only debate whether the definitions are appropriate for their context. Changing the familiar way of defining concepts may require persuasion.

The text also contains a proposition that can hardly be considered a definition. In the second sentence of the text, it is claimed that the defined dimensions are somewhat independent of each other. This

may seem counterintuitive. At first glance, it would probably seem more natural to think that reception-based teaching (e.g. learning multiplication tables) produces rote learning, whereas invention-based teaching (e.g. guidance in making scientific discoveries during research) leads to invention-based learning. However, examples are provided in the quoted text to justify why this understanding is flawed.

I will mention just a couple of these. First, trial-and-error solutions rarely lead to anything other than rote learning, even if teaching is based on an inventive method. Second, producing concept maps regularly leads to meaningful learning, even if the teaching method is reception-based. The central proposition of the text is, therefore, 'The fact that teaching is increasingly based on invention does not automatically increase the meaningfulness of learning'. Based on this proposition, the text presents a subsequent claim:

For school learning, reception-based teaching methods that lead to more meaningful learning must be developed.

Reconstructing central propositions is not always as easy as in this example of Ausubel and Novak's learning theory. Nevertheless, if the propositions are general, there are usually examples in the text of what the exemplary cases implementing them might look like. There may also be counterarguments, counterexamples, and arguments to refute them. If the statements concern specific cases, comparing them can reveal generalisations that the cases might fulfil according to the text.

Division of Argumentation or Structural Analysis

This often requires reading texts in their discursive context to clarify whether they are initiators of a new discussion theme or continuations of an ongoing conversation, whether they are responses to previous texts, whether the discussion is interrupted by the viewpoints presented within them, and so on. Not all texts have a clear argumentative structure, where propositions logically progress with supporting evidence and corresponding claims. This is typical only for informational texts, and even then not for all of them. It is also possible that conclusions and justifications are presented in different texts. For example, justifications for laws and regulations are normally presented in the briefing memoranda and associated committee reports, as well as in subsequently written commentaries.

It is advisable to distinguish between main claims and their justifications. In the example presented in the previous section, such a relationship was evident between the claim about the relationship between teaching and learning and the claim about school teaching, but the justifications for the former had to be sought outside the quoted text. Argumentation analysis can also reveal the position of propositions within the text corpus. Typically, the most important claims are more thoroughly and diversely supported than secondary aspects. The researcher can try to incorporate argumentation relationships into the proposition map, although it is unnecessary to render the image so detailed that essential relationships become blurred.

In research validating interpretive hypotheses, the data are examined to find evidence supporting or refuting the hypotheses. A hypothesis can be considered correct when a sufficient amount of textual evidence supports it, and it can also explain deviations that contradict it. A hypothesis is considered incorrect when there is clear

evidence refuting it. Often, the situation remains unclear, with both supporting and refuting perspectives present. In further research, problems and hypothetical answers must then be formulated in a new way.

The concept map produced in the ‘Finding Concepts’ step can be further elaborated into a proposition network. When creating this network, it is important to keep in mind that in the subsequent steps, the researcher synthesises their own text. For this purpose, they must create their own argumentative structure. Therefore, they must pay attention to those parts of the text that support their conclusions. The completeness of the analysis also requires taking into account text passages that contradict the conclusions.

Checking, Interpreting, and Using the Analysis Results

Identifying Preconditions, Gaps, and Contradictions

The purpose of this stage is to review the compatibility of the text materials and parts that are relevant to the research problems. Questions to consider include logical consistency, coherence of content and presentation, and the completeness or exemplary focus on certain key points only.

The examination is critical in the sense that the author of the text is assumed, in some instances, to have fallen asleep like Homer, writing against themselves. These points may be random slips that have no significance for the interpretation of the text other than that the error can be corrected if necessary (such as typographical errors made by French typesetters in Joyce's first English edition of Odyssey). However, some contradictions clearly indicate ruptures in the text, points that reveal oppositions in the author's thinking. Interpreting them significantly deepens the understanding of the text and can also lead to deconstructive analysis.

Multimodal texts are sometimes based on parts that represent incompatible ideas, even paradigms. For interpretation, it is necessary to clarify the implicit assumptions within the text:

- Are terms used consistently throughout the entire set of texts?
- Are the concepts complementary and compatible?

Even then, there may still be missing concepts that would actually be required for a natural treatment of the topic. Conversely, when using concepts as propositions, ideas may be presented that do not align with other thoughts presented in the text. The text may also lack definitions or claims that logically belong to it. It is necessary to consider whether all perspectives have been addressed or whether the text is limited to advocating for a specific standpoint. The text may provide clues as to why the author has chosen such a one-sided strategy.

Familiarity with formal logic and linguistic pragmatics can assist in this stage. They provide formal algorithms by which the functionality of the logical structure can be tested in demanding theoretical cases. This is necessary when the author has used a logical or mathematical presentation method.

Comparing the Overall Structure with the Research Topic

Systematic text analysis often begins with an exploration of the meaning of one or two concepts or propositions in the texts under study. It is challenging to analyse larger entities in a way that would have lasting significance as the research progresses. However, if the problematisation is successful, such partial analyses may open up the text much more broadly than one could assume from the outset. This expansion can be seen as an indication of the relevance of the starting point for the research topic. Rarely can significant research be conducted from a trivial starting point, but something initially insignificant may prove to be valuable through analysis.

The task is to relate the researched topic to the overall meaning of the text corpus. Can the essential content of the message be captured through the analysed sub-problems? If the research is successful, a thorough exploration of the sub-problems may also shed new light on the whole or illuminate some aspect of it that would not be apparent without the research results. If the entirety does not appear as a hologram in the analysed aspects, it is worth stopping to consider the following:

- Have secondary, textually insignificant aspects been chosen for study?
- Can their study be justified by perspectives emerging from sources other than the research material?

The irrelevance of the results to the texts may require expanding the research or returning to square one. Because the research starts from problematisation, inappropriate questions may have led it off track. This is much more common in transcendent than immanent analysis. Examining the text from the perspective of a foreign theory sometimes leads the researcher far away from the text's own message. In deconstruction, misalignment of oppositions may also distract the researcher from the intentions of the author.

Systematically transitioning from parts to the whole and from the whole to parts is therefore a form of validation of the analysis and its resulting interpretation. Functionally, this also means that after analysing key parts of the text, the entire dataset is carefully reviewed to ensure that interpretations and conclusions provide an accurate picture of the whole and not simply isolated parts.

Comparison and Synthesis

The results of the analysis can be compared with analyses conducted on similar subjects. Essential similarities and differences can further deepen the answers to research problems. Often, immanent reconstruction serves as a preliminary stage for comparison. In this case, the issue is not only one of comparing the results obtained from the research with those produced by other researchers but also ensuring that the comparison forms a separate research task. I will not delve into the detailed methods of such a comparison here. However, comparison becomes easier if its purpose is taken into account when conducting basic analyses. Useful aids include creating graphical representations and presenting the key propositions and overall structure of the text using formal or semi-formal notation. Concept maps have been recommended for graphical representation. A precise but considerably more laborious tool is the concept graph technique implemented as an extension of the Prolog programming language used in artificial intelligence applications (Schärfe & Öhrström 2000). The advantage of the latter is the exact correspondence made between graphical and formal presentation styles.

It is advisable to prepare a synthetic report that adheres to the essentials of the analysis. This report should present sufficient detail for the reader to understand how the analysis was conducted and how the conclusions were justified. However, the abundance of detail should not obscure the main lines of the overall picture. Transparency serving parsimony is an ideal in research writing. Clarity is essential in synthesis. Every successful research produces new knowledge as a contribution. The researcher must identify the actual contribution of the work. In text analysis, a simple question

often helps in this regard: Why should the reader bother to read your report in addition to the original texts you have analysed?

In addition to the main report, as the research progresses, several articles can be written presenting specific questions that arose during the research. Research work always involves participation in scientific discourse. In this process, the researcher must defend their viewpoints and make critical observations regarding the work of other researchers. Although stating this is beyond the scope of this article, it is important to recognise the collective nature of research work. By participating in discussions, the researcher is contributing to the creation of a community of scholars, which may become their own invisible college. The interpretation of every demanding text, for oneself and for future generations, requires such a network of interested enthusiasts.

Key Terms

Analysis refers to the examination of the material under consideration, resulting in interpretation, translation, classification, compilation, abstract, or other analytical results.

Argumentation denotes the construction of descriptions, justifications, and reasoning structures, where the reasoning elements, or arguments, are used to persuade readers of the correctness of conclusions through logical chains of inference. Argumentation can also be misleading. It is a central part of the structure of informational text, and understanding it is one of the central objectives of text analysis. In reporting research results, it is the third main part, alongside problematisation and explication, where the achieved results are justified with the assistance of the research design.

Archetype Theory is a part of Carl Gustav Jung's personality theory, which suggests that the human psyche contains deep structures guiding human thought and development. These serve as prototypes of humanity and human relationships, manifested in culture and the texts it contains. They appear at least partially as pairs of opposites, such as the masculine side of a person, Animus, and the feminine side, Anima. Spiritual growth requires that individuals master these oppositions in their development. Archetypal conflicts are also activated through texts if such texts have mythic depth. This is exploited in art, entertainment, and advertising.

Deconstructive Text Analysis involves examining the deep-level opposites, or oppositions, in the text. Whilst in reconstructive analysis only the manifest content of the text is elucidated, in deconstruction, additional meanings are sought by repeatedly accepting the alternation of opposites in the analysis.

Discourse, Discourse Analysis: Discourse refers to the totality formed by several more or less related texts. A conversation between two people is a (often relatively short-lived) private micro-discourse. In the media, exchanges of ideas can last for weeks or even months, whereas 'dialogue' between philosophers can span generations, even thousands of years. These could be called public macro-discourses. In a broader sense, discourse analysis is sometimes used to refer to almost any type of text analysis (or content analysis), but sometimes it specifically refers to a particular approach, such as Michel Foucault's method of analysing text material.

Exegesis refers to the study of the meanings of texts connected to their original social contexts.

(1) (In general) Historical textual research, which elucidates the details of the text, its genesis and editing history, and its formal features in relation to contemporary rhetorical practices, interprets its content and often examines the text's source value and contribution to the reconstruction of the history of the time. (2) (In theology) The study of the Old Testament, intertestamental texts, the New Testament, and texts closely related to these collections.

Explication denotes the application of theory or conceptualisation to research, ensuring the research subject is scientifically conceptualised. Defining the terminology to be applied in research and then consistently using it to present the research subject and results constitutes the basic form of explication (cf. problematisation, argumentation).

Phenomenology is a philosophical approach that offers a new starting point for scientific research. It is essentially based on reduction, in which the irrelevant accidental features of the phenomenon under study are excluded from consideration. The term paradigm originates from the natural sciences but has become common in philosophy as well as in sociology, psychology, and nursing.

Hermeneutics:

(1) The study of the current meanings of a text, as well as the possibilities for interpretation and application.

(2) A methodological paradigm specialising in the interpretation of culture and rooted in the traditions of ancient text interpretation. The pioneers of modern hermeneutics are considered to be the German Friedrich Schleiermacher, known as a Platonist interpreter and the founder of practical theology, and the philosopher Wilhelm Dilthey, who emphasised the fundamental difference between the natural and cultural sciences. The central idea of hermeneutics is the deepening of preliminary understanding through research into a new, better-founded understanding, which then forms the basis for the next hermeneutic research cycle.

Hermeneutic-phenomenological research paradigm: This is a paradigm that emphasises the interpretation of meanings. It applies hermeneutic methods (also used in positivist and postmodern research) following the step-by-step approach of phenomenological reduction. The paradigm is suitable for immanent analysis, which progresses from the standpoint of a particular culture, community, individual, or individual text.

Immanent Text Analysis uses the text's own theoretical basis, terminology, and vocabulary for interpretation. It is the opposite to transcendent analysis.

Intertextual Reference resembles, repeats, or refers in some other way to a previous text. 'All new texts arise from old texts', and even the choice of genre for a text creates references. References to foundational cultural texts (e.g., the Quran or the Bible) are often unintentional; the referrer may not even be aware that they are using the text. However, intertextual references are often used as a stylistic device or as an indication of respect or contempt for the referred text.

Isagogy, or introductory studies, refers to the study of the origin, appearance, genre, translations, and media variations of a text.

Critical Paradigm: A research trend in the social sciences that combines Marxism and psychoanalysis. It understands phenomena to be a result of conflicting psychic drives and seeks to identify their relationship to societal progress. The importance of the critical paradigm is emphasised by the fact that psychoanalytically tinged text analysis has consistently brought out essential and surprising aspects of texts. Similarly, examining the text's social position and significance has long been considered self-evident in hermeneutics. The critical paradigm provides theory and methodological rules for

such naive psychological-social critique (e.g. Jürgen Habermas's theory of communicative action).

Corpus/Corpus material (Latin 'body,' 'organic entity,' current meaning inherited from monastic writings and subsequent printing houses): A text corpus is a collection of coherent, co-occurring, or collected texts for the same purpose, such as an author's collected works or collected manuscripts. Corpus Paulinum is a collection of Pauline letters in the New Testament; the collection also includes the Epistle to the Hebrews, which has nothing to do with Paul, and the so-called Deuteropauline letters, which are not dictated or written by Paul, although the texts present themselves as such.

Description is a listing text that highlights interesting aspects of a phenomenon in its entirety, either by aiming for completeness or by using individual examples. Depending on the possibilities of expression, the description can emphasise either the narrative aspect related to the progression of events, the systemic aspect related to the entirety of the phenomenon, or the poetic aspects of the description's expression surface.

Concept is the mental counterpart of a phenomenon in reality or a class of such ideas. Human is a concept that encompasses all dead and living individuals; it can also be used to understand novel characters or, for example, psychology books, which often describe imagined 'people'. A concept is a component of thought from which individual thoughts can be formed by connecting to it other concepts. For instance, Wittgenstein's sentence ‘Die Welt ist alles, was der Fall ist’ (The world is everything that is the case) combines the concept of 'world (die Welt)' with the concept of 'state of affairs (der Fall)', the logical operator 'all (alles)', and the concept of 'being (ist)'. Words are often the names of concepts. Sentences express

propositions, that is, connections between concepts or their individual instances. The content of a concept is twofold: defining properties of the concept (intension) and individual cases falling under the concept (extension).

Genre or Text Genre (French: genre)

Linguistics:

(1) A comprehensive term used for linguistics.

(2) Modern systematic linguistics, as opposed to philology, has historically focused on the study of various languages and their literatures. However, the division between linguistics and philology does not seem particularly useful for text analysis. Nevertheless, it is important to note that modern theorising, largely based on coherence or the concept of internal textual unity, regarding extensive texts developed into a general form at quite a late stage. It is commonly referred to as text linguistics.

Worldview or world concept is a set of assumptions underlying the text, partly based on the producer's understanding of the world. The interpretation of the text is based on the interpreter's understanding of the author's worldview. Without such a shared understanding of the worldview, translation from one language to another is practically impossible. To a significant extent, systematic text analysis involves the analysis of worldviews projected by the text or set of texts.

Marxist Theory is a class-based (emphasising the distinction between the capitalist owning class and the oppressed working class) materialist-communist social theory, or more accurately a set of theories, created by the German-English philosopher Karl Marx and his collaborator Friedrich Engels. It advocates a socialist view of society, as Marx's and Engels's writing style was highly critical of

both the prevailing state of society and the thinkers who dealt with these issues. For example, in their work ‘The Holy Family’, they criticise almost the entire German philosophy of their time in extremely harsh terms. This critical writing style formed a genre that was continued by later communist writers, and it appears to have been inherited in some forms of the critical paradigm, albeit considerably softened.

Myth:

(1) In religious studies and folklore, a myth is a fundamental narrative considered true from the perspective of culture or one of its institutions, such as a story of the creation of the world or the world's origin from an egg. A central myth in Christianity is the story of Jesus' ministry, crucifixion, and resurrection as narrated in the Gospels. The mythic nature of the narrative in this sense does not imply anything about its historical or ahistorical nature. Myths usually accompany a ritual that repeats it. Myths can be classified as containing common elements, referred to as mythemes.

(2) In Aristotle's classical theory of drama, myth refers to the plot of the drama.

(3) In everyday language, myth often refers to a narrative that is non-historical or untrue.

Narrative refers to the storytelling content of a text, a 'story outline'.

Reasoning or argument is a part of a reasoning chain in an argumentative, conclusion-seeking text that supports the conclusion. Justification requires one or more arguments that make the conclusion believable. Factual justifications, where the connection to the conclusion is made explicit in the reasoning chain, form a rational argumentative structure. Conclusions are often supported by emotional, authoritative, or otherwise personal arguments where the

reasoning chain itself may be fallacious but the justifications still seem rhetorically convincing.

Poetics, also known as literary theory or poetics. Poetics is usually based on the theory of textual genres, tropes (e.g. metaphor), and dramaturgy presented in Aristotle's 'Poetics'. However, newer theories of poetry can be built on a broader foundation, such as Grossman and Halliday's 'Summa Lyrica' (Grossman & Halliday 1992, 205-375).

Poem is a textual draft emphasising expressive surface, metaphorical nature, or lyrical content, on which the poetic part included in poetry or prose, or narrative text, can be thought to be based.

Positivist research paradigm. This is a paradigm that emphasises the significance of observable, positive facts. It often underscores the importance of compatibility between mathematically formulated theory and measurement tools for research. Valid measurement tools can determine which of two competing theories are superior. This leads to the development of measurement tools whose results are suitable for statistical and mathematical processing. However, numerous phenomena in the humanities are of such a nature that they are based on the use of natural language or other imprecise forms of interaction that are, at least for now, inadequately modelled by mathematics. Critics of positivism argue that the progress of science even requires the development of poorly compatible explanations in parallel. In text analysis, positivism has been implemented by, for example, seeking the basic dimensions of the semantic universe of language or terms describing their extremes using multivariate statistical techniques.

Post-positivism is a new form of positivism that aims to ascertain positive facts. It explicitly rejects the idea of the reversibility of logical empiricism, according to which valid scientific concepts must have unambiguous measurement counterparts. Although post-positivism does not expect a straightforward correspondence between theoretical concepts and empirical phenomena, it nevertheless emphasises the superiority of scientific theories. In text analysis, this leads to a rapid transition from text-immanent reconstruction to transcendent analysis applying external theories.

Postmodern research paradigm. This is a paradigm situated on the borderland between science and art. Its foundations are rooted more clearly in previous paradigms, particularly phenomenology and critical paradigm, rather than positivism. Key aspects include abandoning the assumption of the systemic unity of the phenomenon under study, the rejection of a single correct theoretical explanation in favour of seeking new metaphors to perceive things from new perspectives, and variation based on translation from one sensory or art form to another (e.g. irony). In textual analysis, this research approach emphasises the significance of new insights arising from the synthesis of various analytical methods.

Problematisation is the starting point of research. The phenomenon under study is questioned by formulating research problems about it. Research inherently involves not accepting previous beliefs and research findings as they are, even though they may serve as initial assumptions or hypotheses. Progress in research requires that the questions address the core of the matter: only reasonable questions can yield correct answers. Therefore, good problematisation is more important than individual results. The way a text problematises the issues it deals with is always a central focus of textual analysis. Problematisation is related to explication (theoretical

conceptualisation) and argumentation (presenting reasoned answers to problems).

Psychoanalytic theory, originated by Sigmund Freud at the turn of the nineteenth and twentieth centuries, views the psyche as multi-agentic, emphasises the centrality of sexuality in human motivation, describes the stages of psychic development, highlights the role of transference in human interaction, and advocates conversation therapy as a solution for psychological disorders. Based on this theory, various new theories have been developed, s large number of which have also been applied to the interpretation of texts. Key psychoanalytic interpreters, who expanded the application of psychoanalysis from individual psychological problems to broader cultural phenomena at the end of the last century, include Erich Fromm, Jacques Lacan, and Julia Kristeva.

Reconstructive textual analysis examines the manifest content of the text, aiming to structure and present it as clearly and accurately as possible whilst adhering to its internal intentions. Reconstruction often focuses on the text's individual concepts, propositions, or overall structure. Regardless of the choice of focus, the expectation is that the result reproduces the original thoughts either as they are, rearranged, simplified, or enriched with detailed explanations.

Reception refers to the private or public reception of a text. The producer of the text usually assumes a recipient (reader, viewer, user, etc.). The expectations concerning them are reflected in the text. However, the reception history of a text is often more diverse than the author's imaginings. Texts attract public attention, are criticised, and new texts are created based on them. Historically, reception can unfold in multiple parallel and successive phases. The study of reception is a central subfield of textual analysis.

Rhetoric, or the theory of persuasive language expression, examines the structures and possibilities of variation in texts aimed at influencing opinion. Historically, it is based on Aristotle's work ‘Rhetoric’ and forms a central part of the theory of factual texts (in contrast to the theory of narratives). Since World War II, rhetoric has also been expanded into the theory of visual expressions (by groups like Groupe Mu in 1992).

Semantics, or the study of meaning formation in linguistic expressions, investigates semantic fields, synonymy, and opposites.

Sememe, semiotics: Every expression is based on elements perceived as meaningful, which can be generically referred to as sememes. Letters, meaningful sounds, phonemes, words, affixes, icons, independent meaningful parts of images, but also extensive entities (like the Mona Lisa, Citizen Kane, etc.) can be individual sememes. Semiotics (or semiology) is a field of study based on the work of Charles Sanders Peirce and Ferdinand de Saussure, which theoretically covers not only spoken and written signs but also communication based on visual, auditory, olfactory, gustatory, and other senses. However, in practice, linguistics and cultural studies constitute independent disciplines and cannot be historically subordinated as parts of semiotics.

Syntax:

(1) Syntax is a set of rules that indicate how the combination and rearrangement of meaningful units of text (morphemes, such as words and their possible affixes) affect the meaning of the resulting whole. It conveys the relationship between the language used and the reality to which it refers. Without syntax, a set of expressions does not form a language; instead, it can only present or represent reality. Syntax is usually divided into natural language syntax and formal language syntax. The programming of computers has rapidly increased the number of formal languages used for various applications.

(2) A subfield of linguistics that studies the grammars of natural languages.

Synthesis: Research work always consists of a combination of analysis and synthesis. In analysis, the various aspects of the research subject are examined comprehensively and in detail. In synthesis, the parts are assembled into a new whole, which can be a new partial or overall picture, model, research report, prototype, application, and so on. In textual analysis, synthesis often produces new texts, usually verbal or graphical. Text production is almost always a form of synthesis.

System:

(1) In systematic textual analysis, a system refers to the arrangement of ideas contained in the text, that is, the set of propositions that represent the essential content of the text. Systematic analysis does not necessarily require the presented idea system to be flawless or logically consistent. However, it has been used primarily for the analysis of texts with relatively consistent content based on a logical system. This situation may now be changing because randomness and lack of systematicity are typical

features of a large number of modern and postmodern texts. The systematicity of content is always an empirical question. However, the systematicity in the name of textual analysis refers to the analysis itself, not the systematicity of the text.

(2) The basic framework of a factual text (compared with a narrative or poem).

(3) In general, a system refers to any set of elements in which at least some of the relationships between the elements are organised, forming a functioning or conceptually significant whole.

Term: A word used as the name of a specific concept. A technical term often refers to a word used contrary to everyday language, following a specific description defining it for a particular purpose.

Theory: A conceptual framework in which the definitions of concepts and propositions representing their relationships are systematically organised, allowing it to be used to describe and explain phenomena under examination.

Tradition: Tradition, or heritage, is a complex formed by established social practices. Interpretative tradition refers to the interpretation performed by taking into account certain sources and following authorities in accordance with tradition. The Jewish interpretation of the Old Testament, or Tanakh, follows the example of Rabbi Schlomo Itzkhakin, also known as RASHI, who lived in the eleventh century and formulated 30 main rules.

Transcendent textual analysis employs the researcher's own or adopted theories, concepts, and vocabulary from other texts in interpreting the text. Examples of transcendent analysis include using psychoanalysis to analyse non-psychoanalytic texts or applying feminist terminology to analyse non-feminist texts.

Interpretation: The use of a text as a text always relies on interpretation. In interpretation, the text (interpretandum) is explained or clarified by another text, or textual or functional conclusions are derived from it – these can be considered in some sense to be the explicit consequences of the text. All of these are referred to as interpretations of the text (interpretans). Interpretation can be a much shorter summary of the original text, a paraphrase presenting the same thing in different words or through a different medium (e.g. a film adaptation of a novel), or a much broader, enriched explanation of the original text. A translation into a foreign language is always simultaneously an interpretation of the translated text. Numerous authoritative religious and philosophical texts have commentaries written about them, explaining their meanings.

Interpretation history: The study of the historical usage contexts of the text and the changing interpretations, along with the conditions and consequences of changes in interpretation.

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Aino Hannula

SYSTEMATIC TEXT ANALYSIS

Focusing on the classic works or Paulo Freire’s pedagogy

In this article, I describe the process of working on my doctoral dissertation on Paulo Freire's pedagogy and how I applied systematic analysis as a research method. Although I focus here on classic research, systematic analysis is suitable for elucidating the content of any text. In educational sciences, the subject can be, for example, the works of a particular thinker, a textbook, a curriculum, or the content of an official document. Because the research process includes a multitude of decisions and digressions that are not visible in the final research report, I aim to highlight those junctures that usually remain unreported.

Keywords: systematic text analysis; systematic analysis; qualitative methodology; methodology; synthesis methods; practice of method.

Introduction

My decision to research Freire's pedagogy of the oppressed and choose systematic analysis as the research method was the result of numerous compromises. I initially envisioned something more dynamic, such as ethnographic research where I could conduct real fieldwork, or an interview study addressing the lived experiences of real people. The texts of a thinker, written material, and a philosophical type of analysis felt unfamiliar and dry. Why research pedagogical literature when the original works themselves are available? I was also unsure whether Freire's ideas contained enough substance to be applicable to the present day, or were even sufficient to produce a decent doctoral dissertation. The first year of research involved a substantial amount of wandering and searching, alternating between cautious enthusiasm and thoughts of abandoning the project.

What did I actually know about Freire and his thinking when I began my research? He was a Brazilian pedagogue known for the pedagogy of the oppressed and, simultaneously, for the pedagogy of liberation. I associated him with the ideological discussions of the 1970s, during which I had become loosely acquainted with his works in Sweden. Later, I frequently encountered his name in the context of Latin American education. He was linked to radical education and leftist thinking, but also had connections to the Catholic Church. Almost all introductions to Freire's pedagogy also included a review of his life. They described his middle-class childhood in Northeast Brazil, his family's impoverishment, and how he interacted with both the poor and the wealthy. They discussed Freire’s shift from a career as a lawyer to working in education, during which time he devised literacy programmes for poor farm workers, and his subsequent exile. They highlighted Freire's dedication to the pedagogical

struggle for justice and humanity. He was a representative of the Third World, whose pedagogy undoubtedly suited developing countries, but how would this fit into egalitarian industrial Finland?

When I started, I did not know how far Freire's ideas would take me. During the first year of my research, I familiarised myself with Freire's life and mapped out his works. I investigated his life stages and the contexts in which his works were created. I searched for his books both in Finland and abroad. I read these works back and forth, in different languages and unsystematically. I got stuck on Freire's main work, *Pedagogy of the Oppressed*, which I read intensively from morning till night for an entire semester. I made copies, underlined passages, asked questions, wrote notes, and scribbled various colour codes in the margins. I pondered Freirean concepts such as dialogue, problem-posing education, praxis, conscientisation, the culture of silence, the generative theme method, adaptive and liberating education, but I did not know how these were related to each other. I tried to grasp the central ideas of the pedagogy, but during the first year, I was unable to even formulate the research problem. This was a frustrating time; I could not organise my reading approach, nor the content, and did not understand the point of studying the educational methods of a political ideologist from the 1970s. However, then came an important turning point. I became interested in the humanistic message of the pedagogy of liberation and the method's closeness to the prevailing constructivist view of learning. I felt it was important to bring Freirean ideas into the Finnish educational discourse.

This first year of drifting and stumbling through the landscape of books proved to be extremely important with respect to devising the research task, conducting the analysis, and describing the results. During this time, I developed a comprehensive understanding of Freire's pedagogy, repeatedly encountered certain themes, began to discern some guiding principles, and learnt to engage in a dialogue

with Freire's texts. Additionally, I almost fully memorised '*Pedagogy of the Oppressed'*.

From Research Topic to Research Problem

Whilst it would be fascinating to uncover the entire message of a classic, this is usually neither possible nor sensible in research. Choosing a central concept, an overarching idea, a specific period of production, or the background thinking of a key thinker as the research subject leads to more fruitful knowledge. Focusing on a limited theme does not mean that the researcher can simply pick certain passages from the material to examine; rather, understanding a central concept typically requires familiarity with the entire body of work.

I chose the relationship between conscientisation and social change as the subject of my research. Without the intensive first-year study of Freire's body of work, I probably would not have chosen this topic. Whilst reading, I considered nearly all of Freire's key concepts, from dialogue through to the concept of freedom and his view of humanity. It was only by immersing myself in his texts that I came to realise that the entirety of Freirean education is about supporting conscientisation. Despite being closely associated with Freire, he himself uses the term sparingly. In a footnote of an article he wrote in 1970, I found the following definition: 'Conscientization refers to the process by which people, not as recipients but as knowing subjects, achieve a deepening awareness both of the sociocultural reality that shapes their lives and of their capacity to transform that reality' (Freire 1970, 452). I was interested in social change because, as a representative of radical education, Freire

belongs to the group of theorists who believe that the role of education is to promote societal change rather than adapt people to the prevailing system. I began to investigate how education facilitates the process by which students start taking social responsibility. Although I found the topic challenging, given that conscientisation has psychological, educational, and political implications, I considered it vital to explore.

However, the theme must still be refined into a research problem to be addressed in the analysis. The research task or problem should be formulated in a way that leads to the phenomenon being examined in relation to its context or as part of a historical continuum. A good research problem, in addition to focusing on the essential content of the thinker's work and being relevant, always opens a pathway beyond the research subject. For example, it allows for comparison, the broader application of a concept, or the pedagogical application of an idea.

I formulated two research tasks: (1) What kind of individual conscientisation does social change require? and (2) What is the relationship between conscientisation, and actions aimed at humanising reality in Freire's pedagogy? During the analysis, the fundamental elements of Freirean education also emerged as by-products, so in the final stages of the research I added a third research task: (3) What are the components of conscientisation education?

Textual Research in Classic Studies

Compared with empirical educational research, a textual researcher avoids many of the difficulties associated with data collection – lengthy fieldwork, transcriptions, or concerns about the data becoming outdated. However, textual researchers face other types of data challenges. The most important of these is the authenticity of the material. A textual researcher should trace the most original source possible, which sometimes means accessing the manuscript. When dealing with a long-deceased classic author whose work exists in various editions, languages, and forms, the researcher must decide on the most authentic version. The source should ideally be read in the original language, as translations can obscure the message or associate concepts and terms with different realities in different languages. Translations can be, and usually are, helpful in the analysis.

An appropriate delineation of the material is another essential factor. The selected literature must be sufficiently comprehensive in relation to the topic to capture the essential aspects, yet also sufficiently economical to maintain the fluency of the research. The basis for delineation is the significance of the material concerning the subject under investigation. In selecting the material, attention can be paid to whether the author's work divides into different intellectual periods, if there is a discernible developmental continuum in the works, or if the theme of interest is confined to specific material. A statistical sample is not suitable for studying the content of thought as the text is an entity of understanding in which there are no genuine parts; rather, the meaning of the whole text determines the meaning of its parts. Although the actual material to be analysed can be limited, the researcher must also familiarise themselves with the author's other works (Jussila, Montonen & Nurmi 1989; Varto 1991).

I delineated the research material to include the early works of Freire, in which he outlines the fundamentals of his pedagogy and introduces the concept of conscientisation. Freire's later works extensively explain, apply, and develop his pedagogy. Other works were used as supplementary support. Freire's most recent, autobiographical works were particularly useful as they explained his personal relationship to his work. The primary material for analysis consisted of Freire's first publications, which are the books '*Educação Como Prática da Liberdade*', '*Extensión o Comunicación?*' and '*Pedagogy of the Oppressed*', as well as the articles 'The Adult Literacy Process as Cultural Action of Freedom' and 'Cultural Action and Conscientization'. These are among Freire's most widespread works, published around the late 1960s to early 1970s. In addition to literary material, I used images from Freire's literacy programmes to support the analysis. Originality posed a problem for me. Freire's native language was Portuguese, but his key works were published in various countries during his exile. I chose the versions that were published first for analysis. For example, 'Pedagogy of the Oppressed', written during Freire's exile in Chile, was published in English in the United States in 1970, although the manuscript was originally written in Portuguese.

Old material is generally not available in bookstores, so useful collaborators include libraries, various archives, foundations, and sometimes private individuals. Although the internet facilitates browsing through libraries in different countries and interlibrary loans are functional, researchers sometimes need to travel to access the material. I personally sought books from Lisbon, Barcelona, and the Institute of Latin American Studies in Stockholm. To avoid unnecessary delays, it is important when ordering interlibrary loans to specify that you need a particular edition of the work, even if it is worn and tattered.

Text Analysis

Application of Systematic Analysis and Researcher Choices

My first year of exploring Freire's texts refined my understanding of Freirean pedagogy, rendering my methodological choices almost self-evident. My aim was to introduce Freire's perspectives into Finnish education and assess their applicability, making systematic analysis an appropriate method. Other ways to examine text content include discourse analysis and content analysis. Discourse analysis differs from systematic analysis in that it focuses on language. Content analysis is similar to systematic analysis, but whilst content analysis aims to classify the thought units contained in the material and potentially lay the foundation for quantitative handling of the information, systematic analysis aims to delineate the worldview contained within the text. This often requires taking even the smallest nuances into account and leads to an examination of what is expressed as hints, side notes, or hidden messages.

According to Jussila, Montonen, and Nurmi (1989), systematic analysis is a method associated with philosophical research which is employed to investigate aspects related to the content of a theory, ideology, or a thinker's work. The aim is to clarify the original conceptual framework by delving into the worldview presented through linguistic expression. Systematic analysis has two functions: analytical, where the thought system within the text is dissected, and synthetic, where the conceptual structure is reassembled. The analytical task involves the examination of existing premises, whereas the creation of new ideas, or synthesis, is based on the

understanding of previously conceived thoughts. There is a reciprocal interaction between the synthetic and analytical tasks. Synthesis can be prepared by dissecting the intellectual products of the authors or by uncovering the comprehensive meanings hidden within language or other forms of expression. Analysis involves intellectual exploration within a world formed by a conceptual or theoretical system, the aim being to highlight insights essential to the thought structure, thus clarifying the original conceptual framework. If necessary, the development of the conceptual framework can be continued. The goal is to achieve a better understanding of the research subject. Systematic analysis is not exclusive to any particular school of thought and can be used in studies representing various philosophical foundations of science (Jussila et al. 1989, pp. 157–160). In my research, I combined systematic analysis with the phenomenological-hermeneutic tradition of text analysis, which has primarily been used in literature, history, and Biblical studies.

In their analysis, a researcher may aim for reconstruction or deconstruction; the analysis can be text-oriented or context-oriented, and can also be conducted inductively or deductively. I aimed to clarify Freire's concept of conscientisation; hence, reconstruction recreating the message of the text was the most practical approach. By contrast, in deconstruction, the search is for contradictions, inconsistencies, and exaggerated meanings within the text (Jussila et al. 1989, p. 179). This requires familiarity with the thought system, which in my case made it more suitable for follow-up research. Because my ambition was to determine what Freire ‘really said’, I chose a text-oriented, immanent analysis. In text-oriented analysis, statements, concepts, and conceptual constructs are extracted from the text under study, with the researcher attempting to immerse themselves in the text. In context-oriented or theory-oriented analysis, the researcher uses material supplementary to the text, such as an external interpretive theory (Jussila et al. 1989, pp. 198–199).

The approach can also be either inductive, building a coherent whole from the author's ideas presented in the text, or deductive, starting with a conceptual whole that may be based on a central idea derived from the text or an externally introduced theory.

Although the choice of method itself did not pose a problem for me, I was quite unclear as to how to conduct systematic analysis. I read methodology literature, but as a novice researcher I assumed I would find a clear method that, if followed, would naturally yield refined results. However, the actual analysis takes place in the researcher’s mind, a process where the researcher interacts with the text to form impressions of what the text expresses, organising the information in the text and also their own approach to reading. This process is unique to each individual. Reading methodology literature is certainly essential, but it often begins to make sense only after one has already conducted some analysis of the material. The most important methodological guides for me were the article written by Jussila, Montonen, and Nurmi in 1989 – which still seems to be the most practical guide for educational text research – as well as the hermeneutic perspectives on text interpretation by Gadamer, Ricoeur, and Hirsch.

At the beginning of my analysis, I scanned the material onto a disk, coded the key subject areas from the text, and classified them using computer software. This method closely resembled traditional content analysis in that I aimed to keep different subject areas separate and examine their content as distinct entities. However, this classification was just the start of the actual close reading, during which I began to follow the paths of the text. I investigated the backgrounds of various concepts and sought to build a synthesis from them whilst searching for a central idea that connected the concepts.

I had identified dialogue and praxis as the core concepts describing learning. To clarify these dimensions, I constructed graphical models of them. These models became tools for compiling the results of my analysis which I modified and refined throughout the analysis. I formed the models inductively from Freire's texts but used them deductively as the analysis progressed, incorporating content from the material that fit these models, as described by Kyngäs and Vanhanen (1999, p. 7). Another option would have been to form the models from a pre-existing framework, such as Marxist, psychoanalytic, or liberation theology frameworks in the case of Freire. However, this approach would have caused me to lose the overall coherence and unique character of Freire's thought, which involves synthesising various, often opposing, ideas.

Initially, I tried to understand the content of the text as objectively and impartially as possible, adhering to what was clearly stated in the text. However, deeper reading and interaction with the text revealed the limitations of this approach. The very attempt to construct a synthesis from the concepts I had found indicated that I could not analyse Freire's pedagogy solely by sticking to Freire's texts. Instead, the texts were part of a broader literary, social, and historical reality.

Researcher as Interpreter

In line with the hermeneutic research tradition, the researcher acts as an interpreter, striving to recreate as reliably as possible the thought system constructed by another person, potentially in a different time and under different circumstances. Interpretation thus has two tasks: to understand the meaning of the thought system under investigation and to bring that thought system, or parts of it, into the current situation.

The interpreter's task is to ‘make the text speak’. Ricoeur and Gadamer discuss the world of the text, which the researcher interprets through their own understanding. This world is both literary and historical, related to the context in which the texts were created. To understand the text's meaning, the researcher seeks to grasp its language and horizon, going 'behind the text' and aiming to capture what may not be explicitly stated. In doing so, the researcher can pose questions to which the text provides answers. The researcher's own horizon, preconceptions, and presuppositions, which are linked to the present, enable them to reconstruct the text's message in a meaningful way. Ricoeur (1981) compares written text with speech, where the author's desire and intent to express something are manifested. In a speech situation, the participants are present, relating to each other and also to the situation, environment, and conditions. As written, the presentation detaches from the oral situation and begins to live its own life through its linguistic relationships to the world and linguistic references. It becomes increasingly understood through other texts. Written text can be stored, made accessible to different people, and become part of a collective memory. Thus, texts form a kind of literary quasi-world (Ricoeur 1981, pp. 145–149).

Reading the Text: Explaining and Interpreting

According to Ricoeur, reading a text involves a dialectic between explanation and interpretation. When a reader explains a text, they approach it as an object without an author or external relationships. The reader focuses on the internal structures and terms of the text. In interpretation, however, the text is placed into a living communication. Interpretation culminates in the process of making a temporally, culturally, or psychologically distant text ‘one's own’, bringing the text's meaning into the present. This process enhances the reader's self-understanding, which is a tool for interpretation and understanding in research (Ricoeur 1981, pp. 152–162, 185).

Varto (1991) clarifies the concepts of interpretation and understanding related to hermeneutic reading. Interpretation involves unravelling the meaning relationships within the text. It is inherently linguistic and can be multi-layered, encompassing pictorial, metaphorical, and symbolic structures, various reference relationships, and unique linguistic rule systems. Understanding follows interpretation and is not about language, but about grasping the idea of the text itself (Varto 1991, p. 39).

Gadamer (1975) discusses the interpretative process as a fusion of horizons. In his view, text interpretation merges two horizons: that of the author and that of the reader. When alluding to an individual's horizon, Gadamer refers to a broad perspective mediated by individuals and tradition, consisting of knowledge, views, and attitudes, which enables a person to look beyond their immediate surroundings. Gadamer highlights the interpreter's ability to situate themselves in the historical context of the text being studied, thereby reaching the horizon of the text. However, full immersion in the text's horizon is not possible; the researcher views the text from the perspective of their own contemporary knowledge and

preconceptions. Thus, interpretation is a reciprocal encounter of two horizons, where the present horizon continuously forms during the interpretative process (Gadamer 1975, pp. 269–273).

Attempts to Reach the World of the Text

How does a researcher reach the world of the text? Following Gadamer and Ricoeur, I aimed to grasp the horizon of the texts and the world to which they refer. Even a preliminary reading of Freire's texts reveals his extensive philosophical knowledge and his tendency to combine various ideas and ideologies. In his writings, he alludes to phenomenological and Marxist philosophy, as well as existentialist thought, borrows from various philosophers and revolutionary thinkers, and uses Christian terminology. To understand both the foundations of his thinking and the nature of the concepts he used, I read the philosophical literature that inspired Freire and works by different thinkers.

My licentiate thesis examiner, Professor Sirkka Ahonen, noted the detachment of my analysis from the societal context in which the texts were produced. This observation led me to explore the historical and social world in which Freire wrote his texts and his role within it. This phase of my research involved delving into the societal and cultural context of Freire's writings, utilising both sociological and historical literature as well as Brazilian fiction. The horizon of the texts emerged as Brazil's democratisation and the increasing participation of the populace, which were part of the broader social, economic, political, and religious transformations occurring throughout Latin America in the 1950s and 1960s. This period was crucial for understanding Freire's thought: the pedagogy of liberation was part of the societal struggle for justice in the 1960s. Exploring the ideology and educational landscape of popular movements supported my interpretations of the concepts used by Freire – the concepts employed in the justice discussions of these movements were very much alive in Freire's pedagogy.

The Hermeneutic Circle and Becoming Experienced

Overall, the analysis progressed as a hermeneutic circle. In the first phase, my initial acquaintance with research on Freire's pedagogy and a superficial reading of his works formed a pre-understanding that enabled me to engage in dialogue with the texts. The second phase, close reading, involved clarifying the concepts, knots, and contradictions within the text – I began to understand the coherence between concepts and the structure of the text. The true understanding of the meanings within the text developed only after I had familiarised myself with the context in which the works were created and the literary world they opened up. I started to comprehend why the pedagogy of liberation was developed and to understand the didactic solutions inherent in the pedagogy.

Varto (1991) discusses the interaction between the text interpreter and the text, noting that the reader interprets and understands the text in the midst of their own life and can interpret the text only in the light of their own experience, world of meanings, and understanding. This was certainly true for me. Following the hermeneutic reading approach, I read the texts repeatedly, and my expanding perspectives continually revealed new meanings within them. Varto also highlights that the reader might bring into the interpretation something that does not belong, such as personal expectations, an external theory, or a deliberate way of associating, causing the text to lose its identity and the interpretation to no longer concern the text itself. The researcher should, therefore, consciously monitor their own reading approach and be able to explain it to others through their research (Varto 1991, 34–38)

From Individual Effort to Collective Discussion

During the research process, I learnt an enormous amount about Freire and Freirean pedagogy, but did I succeed in describing my reading approach and being an interpreter in such a way that I conveyed the message discovered to others? A researcher should not only present the results but also convince the reader of the validity of their conclusions. I made visible the progress of the analysis by presenting text excerpts and compiling interim results into tables and graphical models. My aim was for the reader to be able to trace where the Freirean concepts I used had originated and understand how I constructed a synthesis from the results of the analysis.

The results should not merely be a summary of a thinker's work; the research should produce something new. This novelty can be a more structured description of the thinker's message, the revelation of a contradiction, the presentation of a connection to an underlying thought, the creation of new applications of the thinker's work, or laying the foundation for comparison. The form in which the results are presented can vary, and may include a table, model, graphical description, reflective summary, constructed application, or assertions. The results should also be presented in such a way that they open outward and do not become entrenched in the structure of the studied text, rather, they should strive to bring the classic thinker's ideas into the broader pedagogical discussion and perhaps even into practice.

Because I had already built models and compiled results within them during the analysis phase, it was natural to continue presenting the results using these models. My primary research task was to clarify the concept of individual conscientisation and its connection

to social change. Conscientisation turned out to be a profound process in which the student forms a new kind of connection to themselves both as a person and as a citizen. Responsible action in social change requires that the student understands the reality in which they live and is cognisant of their own uniqueness as a free person who can influence their reality. The third factor in conscientisation is ‘understanding the transformative power of the word’, which means that the student learns to express their own view of reality and find a way to achieve communicative connection with others. The method employed for conscientisation is a multi-level critical reflection that extends from the everyday life of learners to the theoretical analysis of general phenomena (Hannula 2000).

The beginning of my research process was extremely challenging. I doubted both my enthusiasm for conducting classical research and whether Freire had anything to say to contemporary education. However, Freire produced a number of surprises. I had considered Freirean thinking to be more ideological in its educational approach and narrow in its methodology, but it turned out to be rigorously cognitive and close to the prevailing constructivist didactics. When my dissertation was completed in 2000, Freire's pedagogy was also relevant as the pedagogy of the oppressed, as Finnish society was becoming divided into the marginalised and the successful. In the globalising and multicultural society of the twenty-first century, Freirean thought also provides grounds for intercultural dialogical action and media-critical education.

During the research, the essence of classical research also began to take shape. Classical research brings to light forgotten thinkers, seeks explanations from the past for current practices, and clarifies ideas that have begun to be used unilaterally. It is also fascinating to see how the thoughts of different theorists persist, influence, and change in the work of other theorists. Perhaps the most rewarding aspect of classical research is the joy of discovery, noticing how the

theories of different philosophers intersect in the works of others, how insights from the past persist, and how thoughts and ideas live on, combine, and become relevant again in a new situation.

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Ari J. Tervashonka

SYSTEMATIC ANALYSIS HERMENEUTIC THEORY (SAH-theory)

Systematic analysis has been most commonly used in the form of immanent text analysis, which focuses on one corpus material. However, this approach has its limitations when dealing with interdisciplinary research or a plurality of corpus materials.

Overcoming this limitation is no easy feat because systematic analysis has, for good reason, been developed with the idea of understanding inner world functions, meanings, influence, structure, arguments, and interpretation history. To conduct this type of analysis in the case of multiple corpus materials will require, even in an optimal arrangement, multiple times more analytical work and the resulting synthesis building might become unattainable. By understanding and addressing these difficulties, it will be possible to focus on formalising a sound foundation for studying multiple corpus materials in systematic theology, systems sciences, history, philosophy, education, and other sciences that rely on qualitative research.

In this article, the author introduces the use of hermeneutic theory in systematic analysis (SAH). This theory broadens the criteria and phases required for using systematic analysis in hermeneutical research. These additional criteria and phases are necessary because the sources and valid techniques employed in multi-corpus hermeneutical research are more varied than in immanent studies. These forms of research have entirely different

source criteria. The gravity of this problem is further compounded when a complex, hermeneutical research question requires the use of multiple sources, which cannot be addressed using the same criteria as in immanent studies. For these reasons, as a creator of this theory, I advise limiting the use of this theory only to cases of multiple corpus material use in research and interdisciplinary theses.

The creation of SAH-theory was influenced by general guidelines on systematic analysis, systematic thinking, systems analysis, and a structural theory analysis similar to the logic of grounded studies.

Keywords: systematic analysis, systems theory, systematic thinking, interdisciplinary methods, methodology, qualitative methods, qualitative research, research methodology, logical confirmation theory.

Introduction

Purpose of the Theory

Systematic analysis is a text-analytical method that has been used in interdisciplinary research to address qualitative research questions. Numerous systematic studies have been conducted around the same theme, primarily immanently, meaning they have aimed at so-called immanent reconstruction, compiling, for example, the contents of a particular philosophy, worldview, or theory.

This type of content examination is conducted analytically according to the internal rules of the original sources, where, for instance, in an effort to understand a theory, the functioning, limitations, and comprehensiveness of the theoretical arguments are studied.[5] Because the immanent use of systematic analysis is mostly confined to original sources, a problem has arisen in that the method lacks widely employed criteria, especially for broader hermeneutic systematic analysis. Unlike the immanent research approach, hermeneutic systematic analysis is more holistic and thus more varied in its criteria due to the use of more diverse sources.

Therefore, the format of this article is theoretical in nature, addressing the issues associated with systematic analysis through the creation of the theory underpinning hermeneutic systematic analysis (SAH). In this article, hermeneutic systematic analysis and the abbreviation SAH are used synonymously.

In systematic analysis, questions guide the interpretations and analyses in similar ways, but unlike Gadamer's hermeneutics,

[5] Nurmi 2014, chapter 1.

systematic analysis starts with a gradual and open[6] research question in relation to the material. There are two reasons for this difference.

Firstly, in systematic analysis, the focus is on examining arguments, with the aim of understanding the argumentation of the research subject and explaining its functions. Conversely, the core of Gadamer's and Ricœur's interpretation lies in language analysis, which is a central component of discourse analysis. Thus, because the subject of systematic analysis differs from that of discourse analysis, hermeneutics is applied differently through the formation of a synthesis.

The second reason is that a gradual and open approach to analysis frees the researcher from having to make reservations about what the answer to the research question will be, and enables them to encounter many different levels of questions, which in turn generate new questions. Sometimes, these new questions can be more important than the originally asked questions.

[6] Jussilan & Montonen & Nurmi 1992, 182.

Foundations of Theory Formation

Systematic analysis is used as a general scientific method,[7] meaning it has broad applicability through its versatility. As a method, it is predominantly qualitative, leaving hypotheses open for as long as possible. It can also be loosely employed as a methodological-philosophical orientation or emphasis. However, the actual use of systematic analysis necessitates an awareness of the criteria for the use of sources, recognising not only the limitations of general scientific arguments but also the inherent limitations within systematic analysis itself.[8]

The primary aim of systematic analysis is not to create a system but to address the challenges brought by the complexity of data and research questions through modular work and the application of consistent criteria. In this sense, systematic analysis is well-suited for direct qualitative evidence as well as synthesis-based evidence. On a practical level, different sets of criteria always apply to the use of different materials.[9] If the research question or the data are altered, the research problems change accordingly and vice versa.

The method has been applied in fields such as history,[10] philosophy, biology, psychology,[11] economics, systematic theology,

[7] Laaksovirta 1985, 40.

[8] Jussilan & Montonen & Nurmi 1992, 157–161.

[9] Because the hypothesis remains open, it also implies that there is looseness in handling the entire problematic nature of the study. However, this looseness continuously poses criterion problems that require vigilance throughout the research process. This is because the hypothesis evolves and refines the criteria for examining the data and research problems. Therefore, in systematic analysis, one may need to adjust the research question if the data and problematic aspects of the research diverge from the original plan.

[10] Tervashonka 2023.

[11] Madsen 1974 (a good example of systematic theoretical meta-use).

systematic interpretation of law, and pedagogy. The unifying factor underpinning the method's broad and varied use is that different users of the method share a commitment to systematic science. Systematicity itself is not an idea owned by a single scientific discipline or school of thought, but rather a general aspiration in science. In this sense, systematic analysis, as a method, lies at the intersection of the methodological needs and data of various disciplines. Therefore, developing the method is highly fruitful. It has broad potential in fields that utilise qualitative research.

Methodologically, a common issue is that systematic analysis often remains limited to immanent research, which is extremely restricted in terms of material. In general, immanence in research defines the primary material where the aim is to understand the internal mindset of the research subject, often from a material-based perspective. This inherently limits the scope of the analyses and the relationship between the materials used. In immanent research, all other sources are secondary compared to this primary material and are thus subordinate to the criteria for examining specific material. In hermeneutic analysis, by contrast, this framework is more open, but the challenge often lies in the criteria by which diverse or interdisciplinary materials are used in compiling analyses and syntheses. Systematic analysis has clear immanent criteria[12] in these respects, but no established hermeneutic criteria (yet).

Because there are no similar general methodological criteria for hermeneutic research, this article explores how these criteria can be formed from a hermeneutic perspective and what research methods and phases can be employed to apply systematic analysis in a broader hermeneutic form. The advantage of handling hermeneutic material is its broader scope, in the sense that highly diverse

[12] These will be revisited in the section on methodological issues in systematic analysis.

materials can be utilised to support interpretation, which is more limited in immanent research due to its focus.

Globally, research on systematic analysis[13] differs significantly from the research and formation of *systems* theories. The theory of systematic analysis has been developed most notably in Finland, with its history largely based on eclectic application choices. The fundamental idea has been to create systematic science, but not systemic science as in *systems* theories. Whilst systems theories have been developed worldwide under the same label, systematic analysis is a more fragmented and heterogeneous collection of various systematic endeavours. Systematic analysis is conceptually indebted both to the philosophical anarchy[14] of science and the classics of scientific systems theory construction (such as Ludwig von Bertalanffy's 1969 *General System Theory*) and subsequent developments in various *systems* theories.[15]

In the theoretical formation of Hermeneutic Systematic Analysis (HSA), research literature on systematic analysis from various fields has been utilised. Among the most important contributions to its development are Juhani Jussila, Kaisu Montonen, and Kari E. Nurmi's chapter ‘Systematic Analysis as a Research Method in Educational Sciences’ in the book *Qualitative Approaches in Educational Research* (1992). The logic of the method in the context of immanent systematic analysis, which adheres to the text or other material, is thoroughly explained by Jari Jolkkonen's *Systematic Analysis as a Research Method: A Method Guide* (2007) and Aino

[13] Jussila & Montonen & Nurmi 1992, 198–200.
[14] Feyerabend 1975/2010, 7.
[15] Rapoport, Anatol & Parsons, Talcott & Mitchell, William & Kaplan, Morton & Gochman, David (1968) 452–495.

Hannula's chapter on systematic text analysis[16] in the book *Openings in the Analysis of Qualitative Research* (2008).

For analysis and intuition, interdisciplinary literature and Asta Raami's studies on intuition, such as *Intelligent Intuition* (2016), have been beneficial, as have various types of systems analysis books. Conceptually, it is noteworthy that systems thinking (developed in Finland by Esa Saarinen), systematic analysis, and systems analysis are fundamentally different. Systematic analysis is primarily qualitative; thus, the existence or even the systemic nature of the material is not assumed. In systems analysis, the emphasis is often the opposite, with quantitative data being studied through systems logic and/or systematic thinking. The distinction is coarse, and both areas must address qualitative or quantitative problems, which presents a good opportunity for methodological development. In general, the relationships and contents of the boundaries in method development can be significant drivers of progress. Systems intelligence is a newer element that enriches the methodologies of both systems analysis and systematic analysis (for more on this topic, see the research report series *Systems Intelligence* edited by Raimo Hämäläinen and Esa Saarinen, 2005).[17]

[16] More broadly, further details on systematic textual analysis can be found in Kari E. Nurmi's article in Metodix, available via the link in the references.

[17] Hämäläinen & Saarinen, 2005.

Methodological Issues in Systematic Analysis

Systematic analysis is widely used as a method, but its application is case-specific, as it is defined by the framework of each individual study. In addition, analysis-based synthesis building is a challenging procedural effort that can, at best, form irotational development of the views and analysis but, at worst, major mistakes can have a substantial effect on the result. This method demands a highly trained imagination to keep everything entire and at right places designated by the logic of the subject. To address this difficulty regarding imagination, the author has published an article on imaginary methods to highlight the differences in imagination used by different methods.[18] This is a challenging undertaking because it means that the application of the method must be reassessed depending on the research context. I view this application issue as one reason why the use of systematic analysis in Finland has predominantly been immanent, where the range of material criterion problems is much narrower compared to, for example, hermeneutic[19] implementation.

This conclusion can be reached by reviewing the methodological literature on systematic analysis. In Jari Jolkkonen's clear *Systematic Analysis as a Research Method: A Method Guide* (2007), systematic analysis is discussed with an emphasis on text analysis as ‘a set of interrelated text-analytical methods’.[20] The guide's context is systematic theology, where the central methodological challenge is to understand and classify the meaning of the text. Similarly, Aino Hannula's description also addresses systematic analysis through text

[18] Tervashonka 2023, 72-96.

[19] Gadamer 1976/2008, 13, 24–25, 38–42, 45, 82–90.

[20] Jolkkonen 2007, 12.

analysis methods.[21] However, Hannula distinguishes systematic analysis from pure text analysis as follows:

> Other ways to examine the content of a text include discourse analysis and content analysis. Systematic analysis differs from these in that discourse analysis focuses on language. Content analysis is similar to systematic analysis, but while content analysis aims to classify the conceptual units within the material and possibly lay the foundation for quantitative treatment of the material, systematic analysis aims to understand the internal conceptual world of the text.[22]

Hannula explored the relationship between consciousness and change in Paulo Freire's pedagogy of consciousness, which primarily extended the subject to intellectual history but also brought systematic analysis to a broader range of issues. Given that the purpose of the research was to understand the internal conceptual world of texts, the need for the method has been demonstrably broader compared to pure text analysis.[23] The extent of this need can be illustrated as follows.

In Jari Jolkkonen's *Systematic Analysis as a Research Method*, the analysis of meaning is divided into four levels for text-analytical treatment: (i) **analysis of concepts**, (ii) **analysis of propositions**, (iii) **analysis of arguments**, and (iv) **analysis of presuppositions**.[24] Starting from Jolkkonen's text-analytical division, Hannula's notion of understanding the 'internal conceptual world of the text' would, in

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[21] Hannula, 2008, 111–125.
[22] Hannula 2008, 116.
[23] Jussilan & Montonen & Nurmi 1992, 160, 172–173.
[24] Jolkkonen 2007, 12–14.

my view, require an additional (v) **analysis of functions.**[25] For this analysis, parts of the previous analyses must be combined to understand the necessary connections and systemic relationships between different internal functions of the text. Furthermore, because Hannula examined her research topic through various source materials (not immanently), the scope of the research has expanded in terms of source usage. Therefore, it entails the issue of solving more complex problems with systematic analysis if one aims to address broader issues in addition to immanent problems.

In the context of such problem setting, I am interested in the criteria for material use in a broader hermeneutic framework and the criteria and stages of conducting research. These themes are revisited in the subchapter dealing with the theory of SAH.

Although the example given stems from the use of the method with an emphasis on two different fields, the comparison exemplifies why the depictions of systematic analysis by various fields or individuals sometimes differ. Thus, in addition to the limited availability of material on systematic analysis, the methodological emphases of different fields, and sometimes even individual studies, partially dictate how systematic analysis is applied. Consequently, the various challenges posed by different materials and the needs of

[25] The aim is, on the one hand, to closely follow the intentions of the theory's creator, focusing less on discussing the different versions of the theory or its subsequent uses (which often diverge from the original, either in form or in goals). In this regard, understanding original documents such as theory publications as coherent entities that convey the intentions of the creator is crucial for a functional understanding of the theory. The goal is thus to initially analyse original sources independently from other materials, after which subsequent analyses can be synthesised along with the first one, maintaining the functionality of the original data.

the analyses have defined different forms of systematic analysis as a method.

A more comprehensive analysis of systematic analysis was conducted in the book *Qualitative Approaches in Educational Research*. The chapter 'Systematic Analysis as a Research Method in Educational Sciences' by Juhani Jussila, Kaisu Montonen, and Kari Nurmi (1992) provides an extensive take on the subject. Compared to the systematic analysis presented in this chapter, the most significant difference in this article is that I present the two main tasks of systematic analysis with different emphases. In dividing the tasks, I replace the distinction between analysis and synthesis[26] with deconstruction and analysis.

In systematic analysis, there are well-defined components, such as the two-phase approach described by Kari Nurmi, where the systematic analysis of the research subject is divided into the phases of material analysis and synthesis. These phases can be used, for example, in the immanent interpretation of a text in order to understand the overall conceptual world of the text being studied. Nurmi and Hannula have described this method of analysis as the dissection of a conceptual system or framework.[27]

The synthesis thus represents a novel comprehensive explanation of the research subject, created through the compiled analyses. Nurmi has written that 'there are no – and perhaps cannot be – general methodological rules for synthesis'.[28] The formation of synthesis is always an individual process, where a new whole, the synthesis, is formed from the material used and the researcher's own intuitive choices through the analyses.

[26] Jussila & Montonen & Nurmi 1992, 158.
[27] Jussila & Montonen & Nurmi 1992, 158–159; Hannula 2008, 116–119.
[28] Jussila & Montonen & Nurmi 1992, 158.

The lack of criteria for synthesis, however, remains an open issue in systematic analysis, especially if the aim is to achieve a synthesis that differs from or goes beyond the immanent scope. This can also be seen as one of the general reasons why the systematic analysis of a single text is the most popular form of research in systematic analysis. However, if analyses need to be developed concurrently, or if the analyses of different materials need to be compared with each other either as groups or individually, we move far away from immanent problem-setting and towards hermeneutic problem-setting.

In general, the scope of complexity of the criteria for the material and research expands in hermeneutic research compared to how it appears in immanent research. In hermeneutic research, the criteria should extend to the boundaries of the research topic. In contrast to immanent research, where the visible delimitation of the research material defines clearer relevant and argumentative boundaries,[29] the very existence of boundaries can be debated, as demonstrated in the meta-analysis conducted by the author in the final chapter.

[29] Jussilan & Montonen & Nurmi 1992, 194–195.

Deconstruction and Analysis

Because there are no uniform rules for forming a synthesis, nor is it fruitful to create them, it is methodologically beneficial to focus on the early stages of research. Therefore, in SAH-theory, the analysis-synthesis division is not used. Instead, we concentrate on building a good analysis by employing the deconstruction-analysis pair to provide the best possible conditions for assembling the synthesis. More information on these conditions can be found in the methodological work phases.

In the deconstruction phase, the arguments of the material are broken down, and in the analysis phase, an attempt is made to achieve a synthesis – an analytical summary of the contents of the deconstruction. Jacques Derrida (1930–2004), the developer of deconstruction, wrote that deconstruction was not in itself a method or something that could be used to examine a research topic externally, but rather a phenomenon that happens inside the subject of the research.[30] In a similar vein, we can regard deconstruction in systematic analysis as a phase[31] rather than a method, because deconstruction itself does not form a synthesis. In systematic analysis, there must be an analysis phase between deconstruction and synthesis so that the synthesis emerges from scientific processing rather than purely argumentative artistry.

Ideas similar to deconstruction with the same problem-setting emerged in the development of discourse analysis. Paul Ricœur's (1913–2005) inscription (or textual verification), structural analysis, and distancing constitute different aspects of the same problem-setting. For Ricœur, the pursuit of understanding discourse required

[30] Derrida 1974/2016, xx–xxi, lxix–lxx, c, 25.
[31] Derrida 1974/2016, 366.

withdrawal so that the depth of analysis would not immediately become entangled between the 'known' and the 'unknown'.[32] We can perhaps assert, on a general level, that Ricœur aimed in discourse for the same goal that Derrida sought in evaluating the contents of various philosophical presentations through deconstruction, using holistic understanding and analytical withdrawal.

Akin to Ricœur's problem-setting between the known and the unknown, in systematic analysis, the problematic nature of the relationship between the deconstruction and understanding of the research subject depends on the topic being studied. Ricœur's discourse problem was too sudden an understanding or a hasty mental categorisation between the known and the unknown. In systematic analysis, the problem, in addition to the significance of discourse analysis, is the argumentation and function of ideas. Thus, it is necessary to identify which factors in the deconstruction form the criteria for which ideas are argumentatively and functionally central. This kind of problem-setting is often encountered, for example, when studying the formation of ideas in the historical development or intellectual history of theories.

In the deconstruction phase, empathy and intuition are central motivators that ensure the effectiveness of this stage. Deconstruction does not occur in a vacuum, as subjective understanding of the research topic is the basis for the choices that guide the deconstruction process. Asta Raami (2016) has written explicitly about the individuality of intuition processes. Ultimately, intuition and imagination regulate the interaction between the understanding of the subject and the deconstruction. From this perspective, John Dewey's classic philosophical view is essential: intellectual material

[32] Ricœur 1976, 43.

is assembled 'not purely cumulatively from intellectual processes but from social and emotional material'.[33]

Hermeneutic theory of systematic analysis

Systematic analysis, as its name suggests, presupposes a systematic, logically deconstructed and constructed methodological activity. The deconstruction in systematic analysis is similar to disassembling an engine or, on a more complex level, human thought. The arguments of the research subject are deconstructed using a process consistent with deconstruction, which applies uniformly to all contextually significant arguments within the topic. This requirement is the minimal condition for systematic analysis based on the material, as otherwise these parts of the whole cannot be modularly compared within the research.

In systematic analysis, wholes are broken down into understandable parts and categories that can be used to comprehend parts of the whole. To generate a comprehensive analysis or synthesis, it is also essential to recognise, for example, the significance or impact of the material's argumentative content, depending on the research. These function as the final criteria for various comparative activities or when using smaller modular ‘wholes’ logically in synthesising the overall argumentation of the research subject. The function of methodological modularity is to highlight the fact that if the fundamental criteria of systematic analysis are followed, the method can be adjusted relative to almost any research question and material. This is achieved by incorporating

[33] Dewey 1948/2004, 15.

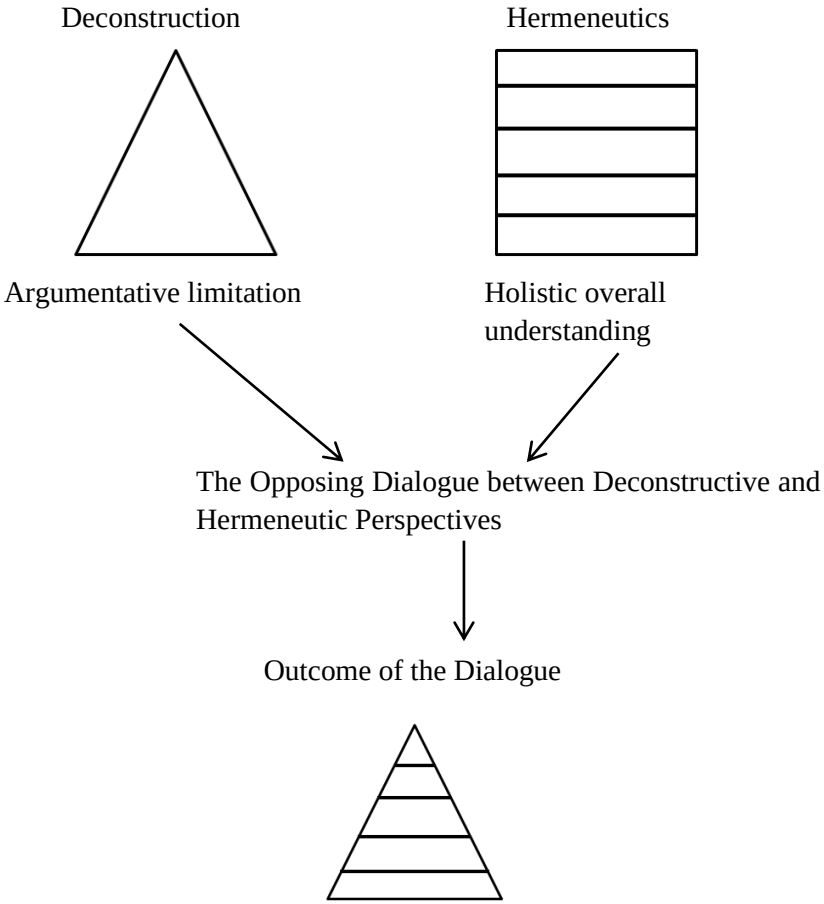
different methodologies or methodological philosophies into the research as modular elements subordinate to the criteria of systematic analysis.[34]

In general, the selection of a method in research is governed by its practicality in relation to the chosen research question. Each method has its own limitations concerning the research subject. Although these are never self-evident or even fully known, they form essential criteria for the research, which define its scientific nature. General criteria such as clarity, reproducibility, comprehensibility, unambiguity, analytical nature, and the development of new knowledge in relation to previous research regulate the methodological choices made.

In SAH analysis, the objective is to formulate a scientific systematic explanation whilst also breaking down the explanatory model's criteria through the polar opposition of deconstruction and hermeneutics in the analysis phase. Additionally, I want to keep open the possibility of the modular integration of other methodological combinations, provided that the work phases of the method, or at least the criteria they contain, are not forgotten in other methodological combinations.

[34] More information about the contents of the criteria within the stages of the SAH method.

The Work Phase of Deconstruction and Hermeneutic Understanding



Viewing the data from the perspectives of deconstruction and hermeneutic understanding, a dialogical conclusion is gradually developed as an analysis during the research. It is equally important

that the research clearly states the argumentative boundaries of deconstruction, as well as the hermeneutic content used as the basis for understanding – from broader contexts through to more specific phenomena.

Through the phases of deconstruction and analysis, deconstruction and hermeneutic understanding have the task of arguing. Both deconstruction and hermeneutics are methodological traditions that have been developed in different directions over several decades. The core idea of SAH-theory is to handle data from the perspectives of both deconstruction and hermeneutics in the initial stage of the research. The aim is to utilise the substantive and intentional differences between deconstruction and hermeneutics by forming a polarised dialogue with the data to construct the analysis.

In summary, the data analysis is conducted between (1) **a hermeneutic empathetic understanding** and (2) **the understanding of the limitations and functionalities of deconstruction's arguments**.[35] Hermeneutics was originally developed for the interpretation of meanings through interpretive understanding.[36] In hermeneutics, understanding includes both self-understanding[37] and the dimension of community, which refers to the self as part of the environment and participating in shared understanding.[38]

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[35] Paradoxically, there is no deconstruction without understanding the internal thought world of the research topic, but there is also no understanding of functionality without deconstruction. Therefore, deconstruction involves not only seeking or breaking down the boundaries of arguments but also understanding the internal thought world of the research topic. One must understand what is being dismantled.
[36] Gadamer 1976/2008, 13, 25, 39; Ollitervo 2003, 42–44.
[37] Understanding oneself and one's actions, and their impacts. Ricoeur 1970/1981, 158.
[38] Suominen 2016, 97–98.

Similarly, in deconstruction, the aim is to understand the contextual dependencies of arguments and seek an exact boundary as to when, for example, a proposition holds true or when it does not. Regarding the analysis of the meanings within a text, deconstruction is, in this respect, a more mechanical tool than hermeneutic understanding. This is why these differently developed traditions of analysis work well as a polarised pair through their oppositions and differences in approaching source material when conducting analyses.

Often, the depth of analysis and the breadth of material considered in research are limited by the combination of ideas derived from the material, functional understanding, and the applicability of ideas with the criteria for the combined use of different materials. Thus, in systematic analysis, when investigating a complex subject, painting perspectives into a particular corner can skew the examination of the material. In SAH-theory, this problem has been addressed by methodologically using two distinct methodological frameworks, hermeneutics and deconstruction, as a polarised pair. The intellectual contention between them results in more comprehensive analyses. This theme is revisited in phases 3 and 4 of SAH-theory.

However, in this article, hermeneutics is positioned more as a methodological moment that is subordinate to the broader research aim of systematic analysis, which is to create an understanding of a phenomenon or reality in which text may be included as an element.

The phases of SAH research are structured such that the success of the preceding phases directly influences the success of subsequent phases. Rarely is a methodological system implemented in exactly the same form in different studies. In systematic analysis, attention is paid to the gradual understanding of the argumentation of the research topic, and this understanding and argumentative logic are similarly repeated in the phase that involves composing the

arguments of the research. The purpose of the order and criteria of the method's phases is to facilitate the use of systematic analysis and the evaluation of research, as well as to enhance the reliability of the formation of deconstruction, analysis, and, ultimately, synthesis.

Phases of SAH-Theory

The order of SAH phases presented below is not important during the research process. Rather, they represent ideal research phases through which the researcher can identify gaps in systematic analysis and thereby improve the formation of a synthesis.

Hermeneutic Phases of Systematic Analysis

1. Balance between deconstruction and understanding
2. Logic of analysis – logical confirmation
3. Binding nature of the coherence of synthesis of analyses
4. Comparability of analyses
5. Demonstrability of synthesis, repeatability of interpretation

Phase 1: Balance between Deconstruction and Hermeneutic Understanding

In the first phase, two separate tasks are carried out:

1) Deconstruction aims to break down and counter-argue functionally central terms, structures, ideas, and interpretations based on evidence. This limits the comprehensiveness of the argumentation.[39]

2) Hermeneutics seeks a more empathetic understanding of others and an understanding of how things have formed. In relation to hermeneutics, this is a holistic activity that counters the differentiating thinking of deconstruction.

Through the different perspectives of these phases, extremely disparate types of analyses can be produced, fostering a critical approach to the subject.[40] Deconstruction involves the evidence-based breaking down and counter-arguing of functionally central terms, structures, ideas, and interpretations.[41]

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[39] In so far as when arguments function effectively in content and when they do not; for example, when seeking to understand someone's thinking.
[40] The methodology of hermeneutic systematic analysis, built on the tension between hermeneutics and deconstruction, resembles Ricoeur's idea of structural thought as an intermediate stage in hermeneutic appropriation. Given his avoidance of the immediate ‘mature’ (*mûrie*) in ‘long road’ (*chemin longue*) hermeneutic appropriation, structural analysis represents an intermediate stage, as the aim is self-understanding through the understanding of texts (Ricoeur 1969, 11 and 34). However, in SAH, hermeneutic understanding itself serves a methodical role in research aimed at broader scientific purposes.
[41] Jussilan & Montonen & Nurmi 1992, 194–197.

In deconstruction, the aim is to find the boundary beyond which the foundational support of the examined argument collapses, essentially engaging in argumentative boundary setting. The precision of these boundaries is directly related to the understanding[42] of the research subject. Striving for comprehensive understanding produces better deconstruction and vice versa. However, it is noteworthy that, when forming a new interpretation, a reconstruction[43] based on predetermined material cannot serve as a substitute for deconstruction in systematic analysis, as the phases and criteria would be entirely different. If reconstruction is carried out by ideologically building on existing material from its own premises, it can be conducted step-by-step like a criminal investigation. However, unlike deconstruction, reconstruction is as material-dependent as immanent research in terms of criteria, as both replicate the original idea.

With a similar aim, deconstruction produces a representation of original thought structures through argumentative content, but one aspect of it is also the analytical delimitation of content. This delimitation includes, inter alia, knowledge about which argumentative contents are and are not part of the research, as well as the effects similar argumentative structures have exerted externally.

In SAH-theory, there is an attempt to maintain an open framework regarding material dependencies, where a gradually developing understanding does not mix with preconceptions, but instead filters through according to the logic of its content as the research progresses. Therefore, deconstruction serves as a counterbalance to empathetic understanding and hermeneutic research activities. Deconstruction is beneficial in this respect because the functional consideration of argumentation or the core

[42] Jussilan & Montonen & Nurmi 1992, 174.
[43] On hermeneutic reconstruction, Ollitervo 2003, 48–49.

idea of a text's operation, content, logic, and sometimes the structure of thought, in addition to hermeneutic mental empathy, is absolutely essential in qualitative research to maintain the objectivity of the subject matter. Therefore, in hermeneutic research, a well-executed deconstruction of the research topic at the outset of systematic analysis is crucial for such objectivity. Reconstruction has to be employed more extensively in research topics where there is limited material available, requiring the formation of more comprehensive syntheses for interpretation. Such a research framework is quite common, for example, in archaeological studies.[44]

Deconstruction is a critical process for understanding the material in hermeneutic systematic analysis. Following the deconstruction phase, reconstruction can be used in the analysis phase, based on analyses that have been grounded through deconstruction. In this way, synthesis is an analytical reconstruction. The aim of the first phase is not to prevent the possibilities of reconstruction but to begin the research in a manner essential for systematic analysis by examining the argumentation of the material.

If it is methodologically more sensible to start with reconstruction, it is likely that a systematic analysis based on SAH, which is broader than immanent analysis, is not the optimal methodological choice. Conversely, the more qualitative material there is available for the research question, the greater the need for systematic analysis. The method can be used in situations where the management of the material may cause methodological problems and more multi-tiered criteria are needed to carry out the entirety of the research activities.

[44] Haggrén 2011, 4–8, 10–14.

Balancing deconstruction and hermeneutic understanding[45] does not involve examining the subject solely based on external criteria. An analytical approach is at its best when it employs qualitative empathetic understanding and intuition. This concretely distinguishes systematic analysis from systems analysis, where the focus is on the facts of the material rather than the qualitative, individually constructed synthesis of understanding.[46] In systematic analysis, the thinking is conceptualist, meaning that the systems are within the analysis and not necessarily in the subject being analysed. This does not limit the function of systematic analysis in situations where the subject of analysis may or may not have systemic properties. It is about the methodical systematicity of the analysis process, which is why there is no restriction on the research subject or discipline – only thematically.

Despite their differences, systematic analysis and systems analysis can develop methodologically in relation to each other in areas where different research topics overlap in coverage. This includes the study of ideas, theories, soft data, and interpretations. In qualitative research, the balance between deconstruction and understanding is crucial because it forms the basis for interpreting sources. For example, in the study of history, theology, and philosophy, it is necessary to understand the temporal context and time as well as the subject being studied, which, for the application

[45] For example, Adam Holland employed a similar analogy in combining synthetically the linguistic connection between information studies and cognitive science. The difference in this article regarding hermeneutics and deconstruction lies in synthesising the connection functionally rather than analogously. In other words, the intention is not to merge these two traditions but to use their contrasts for a more precise delineation of research topics and a holistic understanding of the subject area. Holland 2006, 91—100.

[46] Ollitervo 2003, 37–38.

of systematic analysis, requires examining argumentation primarily according to the spirit of the time. Only from this deconstructive starting point can one proceed through analysis to synthesis and interpretation.[47] In this sense, the questioning of system interpretation in systems analysis approaches the field of systematic analysis.

Phase 2: Logic of Analysis – Logical Confirmation[48]

To establish scientific criteria for the broader hermeneutic use of systematic analysis, it is necessary to consider the general form of activity to which the criteria pertain. Given that creating a general set of criteria for forming synthesis might not be particularly fruitful, the criteria can be defined based on the methodological approach used in the research. In this way, the synthesis improves even if the criteria do not take the synthesis outcome into account.

I call this logic of qualitative research activity 'logical confirmation'. The concept refers to the general principles inherent in qualitative scientific practice, which also form functional criteria for systematic analysis. These principles are not new but are key

[47] This actually brings us closer to Ricoeur than Gadamer, and in fact we cross the boundary Ricoeur himself draws between those 'worlds' that are in front of the text and those behind it, limiting hermeneutics to the former (cf. Ricoeur 1981, 143 and, for example, Suominen 2016, 168). The spirit of the times is clearly something that is also 'behind the text', which may well explain what is 'in front of the text', that is, the world constructed within the text that situates what it actually addresses.

[48] For more on the original paper on logical confirmation theory, see Tervashonka 2022, 25–63.

criteria selected for the function of systematic analysis. Systematic analysis strives for the verifiability of evidence-based reasoning between deconstruction and analysis. Logical confirmation, as a form of activity, serves as a qualitative substitute for pure confirmation theories,[49]which aim either for scientifically exact knowledge or probabilities, such as in Bayesian confirmation theory.[50]

In logical confirmation, the objective is to achieve the repeatability of interpretation in analysis. This means the argumentation of the research is aligned with the evidence from the source material, without intending to fully confirm it. The goal is for the analyses that build the synthesis of the research to be directly connected to the source material. If the researcher develops entirely new analyses, the criterion for logical confirmation is coherence in handling the arguments from the material. Thus, logical confirmation is not, for example, probability-based confirmation, as in the Bayesian approach: it is a narrative method aimed at achieving the repeatability of interpretation in qualitative research.

Because systematic analysis primarily investigates qualitative research problems, systematic analysis does not aim for falsification, verification, or strict confirmation. However, this does not preclude the use of quantitative methods or data, for which it may be necessary to consider the results based on validity criteria characteristic of those data types (validity, reliability). At times, it is difficult, and in a sense pointless, to falsify qualitative research. For example, in historical research, where sources are scarce, the results often include numerous opinions and highly interpretive constructs and syntheses, which place qualitative research in a different context

[49] Crupi, 2015, 1.0–1.2, 3–3.6.

[50] Howson & Urbach 2006, 45, 51, 91–93. In theory, the aim is to verify knowledge, that is, to confirm it through probability-based inference; thus, Bayesian theory is quantitative.

compared to empirical research. Nevertheless, this does not eliminate the need for the binding nature of research analysis, which is achieved in systematic analysis by methodically following logical confirmation. In this way, the binding nature of analyses in forming the synthesis can be described as arising directly from the sources, by combining sources, through entirely independent reasoning, or somewhere between these points. Logical confirmation is primarily a principle whereby the fundamental reasoning is initially explained in terms of the formation of logic. Thus, the reader is not left uncertain as to whether the reference is to the sources or to newly constructed structures concerning the research topic.[51]

[51] Popper 1959/2002, 10–12,57, 72–73; Mahner, 2007, 517–522.

Phase 3: Binding Nature of the the coherence of Synthesis of Analyses

In SAH, the main argumentative frameworks and analyses supporting and delineating the synthesis of the research are compiled from the argumentation and content of the deconstruction and hermeneutics phases. Logical confirmation is crucial for ensuring the logic of the analyses is binding within the research context. If the interaction between the deconstruction and analysis phases is not argumentatively binding, then the resulting synthesis from the analysis will also not be binding. Therefore, the aim of the analysis is to synthesise the argumentation contained in the material produced during the deconstruction phase, with the synthesis being the outcome. In other words, the binding nature of the analysis is directly related to the argumentative comprehensiveness of the materials, the chosen research question, and the binding nature of the synthesis.

Each selected material has a specific argumentative comprehensiveness when reflected against a particular research question. Through such comprehensiveness, each material has an argumentative limitation concerning what questions it can answer. Highlighting this aspect in the analysis forms the basis for the binding nature of the analysis. As such, there is recognition as to what and how the presented question can be answered with the material. When evaluating research conducted according to SAH-theory retrospectively, it is likely that if the synthesis assembled from the analyses seems weakly argued, then there exists a logical gap between deconstruction and analysis. This dysfunction can be assessed either by (i) the lack of sufficient precision in attempting logical confirmation or (ii) the inadequacy of the deconstruction, making the analysis impossible to conduct as implemented. In the context of qualitative research problems, this might mean answering

questions with qualitatively or quantitatively insufficient material, where the limitations of material prevent the questions from being answered. These are the main two problems that can be detected in a weakly argued synthesis – but can be helpful when constructing the synthesis by reflecting on the systematic analysis conducted thus far. In this way, the research work phases can be more easily corrected during the research process.

The binding nature of the analysis is achieved through the practice of logical confirmation and by demonstrating the boundaries of the material and analysis. The clearer the demonstration of the area and durability of the argumentation, the more argumentatively the binding synthesis can be formed. When forming the synthesis of the analysis, the argumentative boundaries of the synthesis are also established. The synthesis, or the partial synthesis in broader studies, must be argumentatively binding because the task of the synthesis in the research is to demonstrate the overall argumentation of the analysis. Therefore, the analysis is a compilation of the understanding of the argumentative boundaries formed during the deconstruction, whilst the synthesis is the overall explanation of the answers given by the analyses to the research problems. The process of analysis is individual, especially in qualitative research. For this reason, additional criteria for the analysis are formed by the criteria set by the sources and the research problem, and the criteria are sufficient for general analysis.

Phase 4: Comparability of Analyses

When using multiple different analyses in research, each has its limitations regarding coverage or argumentation. Before forming the synthesis, it is necessary to evaluate the comparability of the analyses used, meaning that an analysis is a process whose results the synthesis addresses. For multiple overlapping analyses, comparability is not achieved simply by layering the analyses on top of each other. If one analysis is used as part of the next, their relationship must be deconstructed to demonstrate their comparability. Deconstructing analyses requires examining the boundaries of arguments between analyses. As in the deconstruction of the first phase, this deconstruction aims to find the boundaries of the arguments and the areas they can support. When dealing with two analyses composed differently or on different topics, their mutual argumentation needs to be reconsidered so that the boundaries of the arguments are not overstepped for either analysis.

Materially, the comparability of analyses can also be limited by the argumentative limitations of the material concerning the research question. Analyses are not comparable if 1) the materials do not support the connection made between two or more analyses, or 2) the argumentative comprehensiveness of the analyses does not overlap sufficiently to compare or equate them. In the first case, the problem lies in logical confirmation, whilst in the second it lies either in the research question or in the choice of materials.

The effectiveness of analyses relative to each other is often evident only towards the end of the research. For example, when studying the production of a factory over a certain period, we can find relevant arguments in the accounting records. If we have an analysis that reveals the accounting is unreliable in certain respects, we need to consider the limits of the credibility of the accounting and

the analysis in relation to each other. Based on the evidence, it can be deduced that the analysis covers these specific figures in the accounting, but this alone does not indicate the functionality of the entire accounting unless other analyses can be formed to support the interpretation of the entire accounting system.

Thus, the concern is with the limitations of arguments and content. The question arises as to what is overlapping in the analyses and what cannot be comparable in terms of criteria. In systematic analysis, and thus also in SAH, it is essential to identify which analyses are central to the argumentation of the research and to deconstruct these as necessary. Enhanced clarity and illustration of the comparability of analyses can be brought by differentiating the levels of analysis. For example, when examining the development of a particular theory, the thoughts and ideas of the theorist can be divided chronologically, network-based (correspondence), or on other grounds. The risk of this categorisation is the overly consistent use of contents thought differently at different times. The theorist might not have been clear from the beginning about which parts of the theory are interconnected.

During systematic analysis, which involves more complex research problems, a multi-analytical approach must be used. Analyses are then developed in clusters in order to form a synthesis, and the final synthesis is built from partial syntheses. This theme can be examined through the following division of qualitative research evidence as work phases. Direct material evidence is directly referable evidence, but synthesis and broader synthesis evidence are synthesis-based evidence, meaning that they prove through sets of analyses in synthesis form, not by direct source evidence.

Direct Material Evidence
Material Analysis → Conclusion

Synthesis Evidence
Material Analyses → Synthesis → Qualitatively Proven Conclusion

Broader Synthesis Evidence
Material Analyses → Syntheses[52] → Overall Synthesis → Qualitatively Proven Conclusion

Such an interdisciplinary or multiple research question approach requires understanding the internal argumentation of these clusters of analyses. The effectiveness of arguments, as well as understanding (deconstruction) and clearly explaining (logical confirmation) the limitations of the arguments, facilitate the formation of a binding sub-analysis within a broader research framework.

[52] Which function as partial syntheses from the perspective of qualitative evidence.

Phase 5: Demonstrability of Synthesis, Repeatability of Interpretation

In the final phase of a hermeneutically conducted systematic analysis, the entirety of the research is outlined through the constructed overall synthesis, which, in turn, is built from the analyses and, at its broadest, from partial syntheses. The demonstrability of a systematically compiled overall synthesis – meaning the fulfilment of all previous criteria and adherence to logical confirmation – ensures the repeatability[53] of the interpretation and argumentation of the systematic analysis. This is one of the clearest content criteria of systematic analysis. If the chain of thought or argumentation does not employ the logical confirmation from phase 2, or if there is a break in the binding nature or comparability of the analysis, the interpretation made in the research cannot be entirely repeated. Thus, the sub-standard quality[54] of the demonstrability of the synthesis demonstrability indicates potential issues in the research.

Depending on its scope, systematic analysis can consist solely of analyses that are eventually combined into a synthesis, or of sets of analyses and partial syntheses from which individual overall syntheses are formed within the framework of the research problems. In the latter version, which can be, for example, an interdisciplinary systematic analysis, the comparability of analyses plays a much

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[53] Mäkelä, 1990, 52–55, 57-59.

[54] Each synthesis, composed of different analyses, has a specific qualitative logical coherence in relation to its sources. This quality can be examined primarily through the conceptual repeatability of the overall interpretation or partial interpretations, evaluating the process of constructing the synthesis from individual analyses to the handling of data and the content of analytical reasoning.

larger role. The demonstrability of the overall synthesis serves as the criterion for the repeatability of the interpretation.

In systematic analysis, the demonstrability of the synthesis and thus the repeatability of the interpretation made in the research can generally be best evaluated in systematic analysis as a whole at the end of the research. Because the research question is kept open in systematic analysis for as long as possible, most of the critical frameworks of the research are only finalised towards the end of the study. During the final considerations and adjustments, it is important to reflect on whether the research was conducted correctly according to the criteria and the nature of the outcome regarding the repeatability of the synthesis.

This means that, upon completion of the research, the user of the method can assess the repeatability of the interpretation by considering whether logical confirmation functions in the context of the materials, analyses, and synthesis construction – that is, whether the qualitative synthesis presented in the research is intellectually repeatable. Additionally, one can critically evaluate how well the argumentation of the research topic, following logical confirmation, has been formed and whether the materials support the examination of the topic in light of the chosen research question. Each material has its own scope of coverage depending on the question asked and the methods used. Understanding the limitations of these forms of comprehensiveness and their analytical connectivity through their content constraints together form the qualitative criteria for systematic analytical examination.

Conclusion

The constructed hermeneutic theory of systematic analysis (SAH) addresses its applicability issues through five research phases, especially when extending the analysis from immanent research to a hermeneutic approach. This extension aims to create a foundation for hermeneutic systematic analysis which is as robust as that of the immanent method. The primary advantage of this extension is the methodological safety it offers in multidisciplinary research – provided the research team adheres consistently to the criteria. Additionally, interdisciplinary work with diverse materials becomes feasible with homogeneous criteria for handling, interpreting, and conducting analyses.

In systematic analysis, the research question and problems are kept open during the study, making the method inherently data-driven. However, the phases of SAH-theory are more theory-driven, as the criteria they establish significantly influence the course of the research. This combination places SAH-theory at the intersection of data-driven and theory-driven research, a fertile starting point, especially when the complexity or limitations of the research material make it challenging to choose between data-driven and theory-driven approaches. This emphasis has significant implications for methodological choices.

Systematic analysis has often been used immanently, with a narrower scope creating its own criteria framework. In comparative or broader research settings, these criteria are exceeded because the diverse arguments contained in different materials cannot be evaluated using the same criteria. This leads to issues with material handling, research methods, the binding nature of analyses, their comparability, and thus the repeatability of the synthesis. For each problem, SAH-theory has developed a corresponding research phase,

each critically related to the others. This methodological framework and modular approach aim to provide a foundation for studying complex problems and addressing interdisciplinary issues. In this sense, SAH-theory borrows fundamental principles from immanent systematic analysis, such as the gradual construction of analyses and syntheses and keeping the research question and problems open for a longer period.

Whilst the sequence of the phases presented in SAH-theory is not critically important during the research process, all phases should nevertheless be present in a hermeneutically conducted systematic analysis. For example, adhering strictly to immanent criteria does not suffice for the scientific rigour required in hermeneutic analysis. The logic of handling broader materials differs from a methodological standpoint. Understanding the criteria as a whole assists the researcher to grasp the issues related to the research question, material, and other methodological needs of the research topic. SAH provides a qualitative and systematic roadmap for hermeneutically conducted research across various fields and offers a foundation for evaluating the implementation of hermeneutic systematic analysis.

There is a similar need for broader analysis in the field of systematic theology, as noted in Ida Heikkilä's 2020 article in the Theological Journal (1/2020). SAH-theory addresses the issues of qualitative criteria and broader methodological application. The development of the theory has focused on the methodological and material reliability of research. As Heikkilä noted, this expansion does not originate from theology, although theological methodologies, such as those in Jari Jolkkonen’s guide and Kari E. Nurmi’s extensive works, have been instrumental in the research. In Nurmi's case, the development of systematic analysis extends beyond a single discipline, being philosophical and broadly interdisciplinary in nature. We can also see the potential of SAH-theory as a

multidisciplinary and interdisciplinary philosophical implementation.[55]

[55] Heikkilä 2020, 68.

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Vesa Suominen†

APPLICATIONS IN THE FIELD OF INFORMATICS AND DOCUMENTATION RESEARCH FOR SYSTEMATIC ANALYSIS HERMENEUTIC THEORY (SAH-theory)

*The following article has been separated from an original Finnish co-written article in accordance with the suggestion and wishes of the late Vesa Suominen. Suominen wrote about applications in the field of informatics for the SAH-theory created by Ari J. Tervashonka. This paper has now been translated and republished separately to honour the memory and wishes of Vesa Suominen and his works on LIS studies and hermeneutics.

Abstract

The following essay gathers the main points regarding the methodological applicability of systematic analysis hermeneutic theory (SAH-theory) to information science and documentation research and expands its views on hermeneutics. Vesa Suominen included in his methodological application key points from hermeneutics that draw heavily on his earlier, extensive research on this topic.

Suominen included the field of information and documentation research (LIS) in his research applications for an otherwise theoretical SAH-theory. Information research is viewed as chains of consequential heterogenic material that would benefit from synthesis basis proof methods, albeit with the understanding that hermeneutic studies tend to be more holistic in nature and are only rarely limited to immanent research perspectives. Although in SAH-theory the focus has been to provide criteria for synthesis-based proof and research tools in cases of more heterogenic sources, similar demands can be found in the field of LIS research.

What divides SAH-theory from other hermeneutic theory structures is the use of hermeneutics as a minor focus in terms of methodological order. SAH-theory uses hermeneutics as one avenue for providing holistic views, but its criteria of use fall under the logic of systematic analysis to ensure the scientific integrity of this type of analysis and form the basis of systematic synthesis creation. LIS research combines informatics and meaning with the study of interpretation. Therefore, there is a natural connection between hermeneutic theory and SAH-theory for studies in the field of LIS.

SAH-theory and Qualitative Research

As an example of a field to which SAH-theory would naturally apply, this article discusses information science, specifically library-, information-, and documentation research (LIS). With this focus, I refer to a group of interrelated but differently named and emphasised academic traditions such as library science, library and information science, information studies, and documentation research. This group also includes more narrowly defined fields such as information management and leadership or bibliography, and even book history or research.

It is useful to conceptualise LIS research, particularly information studies as its currently dominant academic tradition, and its research subjects at a general level, as a kind of chain. In this chain, documents or various messages and information move from the sender through different transmission or mediation phases to the receiver, where attention is often given to the receiver's potential for producing new information (cf. e.g. Järvelin & Vakkari 1988; Borgman 2008; Suorsa 2017). In this chain, the following phenomena are identified as foundational for various sub-areas:

- Information production (e.g. research, writing, or other actual productions and the publication of their results, book history, or book studies/research).
- Information transmission or mediation as well as information storage and retrieval (including so-called information storage and retrieval functions, as well as systems and the description of information within them, and bibliography in a narrower or broader sense).
- Information acquisition and use as well as the creation of new information (e.g. information management and leadership).

Within this chain, research becomes extremely heterogeneous, including, inter alia, partial historical-sociological analysis of documents and their production, applied research on linguistic functions and phenomena, and information technology structures and systems related to storage, as well as general research on 'information behaviour' and practices and structures related to information or its production.

Qualitative methods have occupied an extremely strong position in LIS research, especially since the last decades of the twentieth century, and thus starting points have been sought in this article from hermeneutics, which is mentioned as a possible component of systematic analysis (see, e.g. Benediktsson 1989, Capurro 1992, Hoel 1992, Hansson 2005, Suominen 2016, Suorsa 2017).

SAH-theory, Information Science, and Documentation Research

SAH-theory enables not only direct evidence-based argumentation but also, in this broader form, criterion-acceptable synthesis-based argumentation. This type of argumentation requires more diverse sources, which can blur the criteria for analysing them. SAH-theory aims to produce general methodological criteria that allow the hermeneutic version of systematic analysis to be applied in the same way in the formation of different synthesis-based arguments. This is a methodological prerequisite for numerous interdisciplinary systematic analyses and represents the desired development work for systematic analysis.[56]

In the history of LIS research, there has been much discussion of user orientation, marked by Brenda Dervin and Michael Nilan's (1986) article 'Needs and Uses of Information' (see also Talja & Hartel 2007). However, this still relatively strong emphasis has also attracted criticism from a more holistic perspective that emphasises other elements of the information transmission process – both document producers and intermediary systems – in addition to the user (see Ingwersen 1992, 55-57). Whilst Carol C. Kuhlthau (1993/1994, 1) criticises the 'bibliographic paradigm,' Birger Hjørland (2007) defends it, emphasising that 'the study of literatures cannot be replaced, for example, by the study of users' (see also Suominen 2007; Suominen 2016, 69-73 and 79-88). User-oriented research, as such, is typically behavioural science in nature. Conversely, the 'bibliographic paradigm' rehabilitated by Hjørland's holistic critique, which emphasises the importance of 'literatures', can also incorporate historical-cultural phenomena and

[56] Heikkilä 2020, 68-74.

corresponding materials and modes of argumentation. In this case, an examination of the boundaries of different materials and arguments contained in SAH may become necessary depending on the specific research setup and objectives. Because the formation of SAH-theory is theory-driven, this article also aims to illustrate this by outlining possibilities for its application in LIS research.

SAH-theory and Applied Hermeneutics

The application of hermeneutics subordinately to systematic analysis is actually quite common within a number of special sciences and also within LIS research. However, it differs from the more general research rationality that can be characterised as 'genuinely hermeneutic' and which is defined by the interests of becoming part of a tradition, adopting it, and thus cultivating a shared rationality.[57] In the context of SAH, hermeneutics, from the researcher's perspective, involves interpretive but objectivity-seeking research on certain 'others' or 'their meanings'. Moreover, despite differences in perspective, it does not involve nurturing and cultivating possibly shared 'our meanings' in a way that corresponds to the basic rationality of the humanities as conceived in the Gadamerian sense.[58]

In any case, hermeneutic emphasis itself presents a challenge to the sense of openness and boundlessness of knowledge. [59] Compared with immanent research, it is not – and should not be at the initial stage of research – self-evident in terms of materials where the boundaries of the data to be used lie. This is part of the thinking of the hermeneutic circle. We acquire knowledge gradually in the

[57] In Gadamer's (1960/1992, 264) words, hermeneutics takes the text here as a ‘mere expression of life’, but if we were to read, for example, Aristotle in a 'genuinely hermeneutic' sense and in the spirit of Gadamer, we would take seriously what Aristotle writes about the very subject he is discussing (for example, virtue). In that way, it would be as if we were conversing with Aristotle about that subject and simultaneously becoming participants in and adopting the tradition of discussion about virtue – and perhaps even virtue itself in the process. We would not be so much interested in Aristotle himself – unless, perhaps, we are interested in the extent to which it might help us better understand what he tells us about virtue.
[58] vrt. Gadamer 1960/1992, 230; Suominen 2016, 97; Suominen 2017.
[59] Sell 2003, 95–96.

context of problem examination, whereas in qualitative interpretation we approximate the truth line by line and thought by thought. Given that, from a hermeneutic perspective, especially at the beginning of research, the criteria cannot be in the same proportion in terms of data delimitation as in immanent research, we need criteria to guide the different phases of the research. However, it is essential to understand that these phases do not arise purely according to the method employed. Each researcher always applies the methodology in a slightly different way.

Discussion

SAH-theory would undoubtedly have applications in mainstream LIS research related to information behaviour and practices, which contains interpretive elements. Along with the structures related to them, the possibilities of applying SAH would perhaps most naturally pertain to the analysis of interview and survey data, as well as documents describing these social phenomena. Thus, in research designs relying on various qualitative data, it would become possible to pursue increased reliability whilst simultaneously creating more opportunities for the critical examination of the results.

In this regard, it is particularly important to note that LIS research deals, on the one hand, with communicative and meaning-related matters and phenomena, which also require interpretive approaches. From this perspective, the central theme of the article – combining the hermeneutic moment with systematic analysis – seems entirely natural. On the other hand, the mainstream of LIS research – perhaps most prominently represented by the scholarly tradition known as information studies – is fundamentally socio-technologically motivated and is in that sense a 'design science' underpinned by the descriptive side of the discipline (Järvelin & Vakkari 1988; Okko 1988; Järvelin 1997). In the words of Jürgen Habermas (1965/1971, 308–309), we can speak of the basic rationality pervasive in LIS research as being how 'possible predictive knowledge' serves the interest of 'technical control of objective or objectified processes'. Such predictive knowledge must naturally be adequate or objective regarding the specific reality to which technical control is applied. The definitions within the research field are characteristically marked by an emphasis on enhancing communication. However, one of the central criteria for knowledge underpinning the control of objective or objectified

processes is a certain – albeit often only partial and thus relative – correspondence with the processes themselves and the associated realities.

The contribution of SAH-theory to LIS research, and more generally to qualitative studies, could particularly relate to situations where qualitative methods aim to scientifically and perhaps even objectively describe a phenomenon. From this perspective, the essential component of SAH is the balance between deconstruction and hermeneutic understanding, precisely the aspect that scholars have sought to integrate into systematic analysis.

Thus, it would not primarily be about how, in constructing our own persona or community with others, we should or could genuinely and, in a Gadamerian sense, guided by hermeneutic thinking, relate to a tradition or a text that belongs to that tradition. It is important to note that often in LIS research, hermeneutic thinking is in a subordinate methodological position concerning the broader production of scientific, perhaps even objective, interpretive knowledge about phenomena (cf. Hansson 2005: Suominen 2016, 271-276; Suorsa 2017, 56). In such cases, the fundamental criteria of an individual study – depending, certainly, on the specific interests of the research – derive from this broader rationality of scientific research. Even in research with strong hermeneutic elements, it can be meaningful to consider questions of validity and reliability (see, e.g. Suorsa 2017, 56 and 155).

Multimodality and the need to analyse and understand the limitations of different data and arguments are particularly emphasised in interdisciplinary research (see Phase 4 of SAH theory). In LIS research, interdisciplinarity is noteworthy in the sense that various fields of research and life areas, along with their unique aspects, may also have an information or documentation aspect. Knowledge and information about energy markets or even the

weather, along with their production and use, are significant in the overall context of renewable energy and its production (see, e.g. Huotari, Suorsa, Ikkonen & Innanen 2016). Libraries can also be studied as parts of other functions such as education and teaching, and in this context, as parts of learning (see, e.g. Kuhlthau 1993/1994; Garrison, FitzGerald & Sheerman 2019).

Substantially broader than mainstream information studies, the potential rationalities of LIS research can be outlined on a very general level through the following fundamental dichotomy: (a) '*nearly what so ever for knowledge becoming into and developing as a resource*' and (b) '*about scriptum est for nearly what so ever*' (where 'scriptum est' refers to what literature has produced). Option (a) **broadly outlines** the design science basis of mainstream information studies, whilst (b) describes a more historically oriented approach, such as, and especially relevant to, the library field's scholarly foundation through book history and the general production of knowledge about literature and documentation, thus emphasising bibliographic research (Suominen 2016, 350).

Option (a) implies the consideration of various factors affecting the achievement of desired goals, which may also require reconciling arguments based on fundamentally different types of data. Option (b), by contrast, would come closer to general historical research (e.g., intellectual or ideological history) in the 'authentically hermeneutic' sense described above, although it would possibly be contextualised socio-historically (see Suominen 2016 *passim*; cf. also McKenzie 1999).

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Ari J. Tervashonka

META-ANALYSIS OF FIVE SYSTEMATIC ANALYSIS PAPERS FROM FINLAND

Over several decades, the practice of systematic analysis has advanced in diverse fields of study to further the development of systematic methodology and perspectives in science. Most of the research heritage can be traced back to theology and later applications in systematic theology. Some of these developments have built upon the ideas of systems science or systems theory within fields of study such as philosophy, biology, psychology, education, and earlier pedagogy. Of particular interest is the development of different versions of systematic analysis. It is important to consider further development in this area, and which perspectives require greater consideration. To address these aims, this study analyses functionally different systematic analysis guidelines to make them more accessible to a wider audience, as most sources exist only in Finnish. In the current article, I meta-analyse the perspectives of five key publications (almost 200 pages) on systematic analysis in terms of methodological scope, usability, and limitations. By understanding functional differences, it becomes possible to determine in what ways this method requires further development, and what principal directions are available for this. Thus far, the majority of studies have been conducted on single corpus material. Using these methodological perspectives and studying multiple corpuses with systematic analysis can easily add greater procedurality to an otherwise largely open method. If development is conducted

erroneously or extremely subjectively, systematic analysis loses the value of openness. This meta-analysis investigates not only the middle ground of procedurality and openness, but also attempts to find solutions to the increased need for scientific criteria when managing an increasing amount of complexity.

Keywords: systematic analysis, systems theory methodology, methodology, systematic philosophy, systems philosophy, philosophy of science, interdisciplinary methodology

Definition of systematic analysis

Analyses are conducted in a cohesive manner which logically permits the formation of a rational synthesis of the subject matter, thereby explaining it systematically.

Methodological development of systematic analysis in Finland

Systematic analysis is a scientific methodological philosophy that governs the criteria for conducting scientific research. It is and has been attempted in every university with researchers who try to explain the world systematically. The notion, therefore, does not belong to any specific country or philosophy because the idea is in itself very simple, and akin to science as a systematic means of explaining the world. This has taken multiple forms such as the well-known *systems theories* that are logically built structures of different fields of science. These lofty theories, that need decades to make, have been built with similar traits of systematic analysis in mind in order to create them in a sound and reliable manner.

Systems sciences are one application of this methodological philosophy, and are globally recognisable. In addition to this more homogenous heritage, there are innumerable heterogenous variants of systematic analysis. Even in a country of 5.5 million people, such as Finland, there are tens of variants which can be compared but are used in different ways as a methodological tool or philosophy guiding qualitative research processes. An initial question that arises is why researchers use these extremely varied theoretical approaches as sources of methodology. The answer to this lies in the development of heuristics of methodological frames of reference, ranging from a multitude of methodological philosophies to the classification logic of highly empirical evidence gathering. As well as offering vital opinions on the methodological development of systematic thinking in science, these also provide countless methodological perspectives which are manifested in slightly different patterns when a person is orchestrating original research. It

is appropriate for those who try to find unique solutions for each research question not only to produce copies of the same research each time, but also to alter methodological choices slightly to suit the scenario in a better way.

Therefore, systematic analysis in all its versions is the general cornerstone of systematic thinking in science. The following text focuses on the publication of a variety of concepts emerging from systematic analysis papers written in Finland for methodological use and development. I analyse the key logic of each paper and compare the functionality of these versions of systematic analysis. The analysis also focuses on limitations and attempts to classify the use of these methodological papers for more varied purposes. By organising these originally Finnish materials, my primary goal is to convey these ideas globally so that they can be employed for similar methodological efforts. The secondary goal is to gather the varied heritage of systematic analysis in Finland, not as an entire body of knowledge, but as a versatile variety of thoughts to cover the maximum quantity of research questions.

For these purposes, the works considered are the following:

First: Jari Jolkkonen's paper *Systematic analysis as a research method* (2007) is used mostly in fields of theology and systematic theology as a methodological source, but has also been used in many other fields of science.

Second: Juhani Jussila, Kaisu Montonen and Kari E. Nurmi's chapter on the philosophy of systematic analysis in the book *Qualitative perspectives in education studies* along with their chapter "Systematic analysis as a method for pedagogical science" (1989)[60]. The aim of this chapter was to conduct a broad philosophical

[60] In this paper, the 1992 version of this book has been used, hence it is marked as 1992 and in sources as 1989/1992.

assessment of the methodological heuristics surrounding the use of systematic analysis. Despite, or because of, the philosophical focus of this source, this older book is in a very poor condition in libraries due to heavy usage.

Third: Nurmi's later paper in the form of a Metodix article on systematic text analysis (2004).[61] The earlier guide of Nurmi and others is used as a point of comparison to assess the further development of this perspective.

Fourth: Aino Hannula has written on the use of systematic analysis of texts in the book *Openings to the analysis of quantitative studies* (2007[62]).[63] This writing highlights the practice of this otherwise philosophically challenging method, thereby elucidating the philosophy of systematic analysis.

Fifth: in comparison with the earlier guide by Jari Jolkkonen and the works of Kari E. Nurmi, I published a systematic analysis hermeneutic theory (SAH-theory) (2020). The aim of this work was to extend Jari Jolkkonen's four classifications of topics[64] which systematic analysis can research in the theme of functionality,[65] and to broaden the limitations of the originally highly and immanently limited method regarding hermeneutic source considerations (for example, when researching theory heritages).

The methodological functions of these five systematic analysis papers are analysed and compared in terms of theoretical heritage and directions. My reason for choosing these papers is that the similarity of their logic, sources, and reasoning allows general

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[61] Not to be confused with different text reviews that are typically very different in scope.

[62] Within this study I use the 3rd edition version published in 2008.

[63] Hannula 2008, 111–125.

[64] Jolkkonen 2007, 12–20.

[65] Tervashonka, Suominen 2020, 49.

comparisons to be made.[66] Not all functions or elements of these topics can be compared evenly, as all extend to different venues methodologically. The important aspect of this consideration of differences is to demonstrate simultaneously the limitations and expanse of these methodological perspectives. If their content is already familiar to the reader, it is advisable to consult the comparison chapter. The focus of the following five subchapters is to briefly translate and explore key methodological arguments of the original papers. These five summaries have been created for nearly 200 pages of original materials which have a similar common scientific heritage, philosophy, and sources. At the end of each summary, I analyse the methodological and philosophy of the science content of the papers. I then conduct a comparison and synthesis of current uses of systematic analysis and present suggestions for new theoretical expansions.

[66] For example, Nuopponen has used systematic analysis specifically for the analysis of meaning with a heavier leaning towards systems sciences through the theme of concept systems. These different views are extremely important for further development but for the sake of baseline "cohort" similarity I have chosen papers with a similar systematic logic, thereby excluding systems analysis from this topic. Nuopponen's views remain an example of how to combine a qualitative analysis logic with a systems approach in science. Nuopponen 2020, 94–122; Laaksovirta 1985, 35–44.

A part of the theology heritage on systematic analysis

In the widely-used guide of Jari Jolkkonen, the initial assessment of systematic analysis is extremely similar to the philosophy of Kari Nurmi. This implies that the method is a mixture of textual and conceptual analysis which together creates this very open, but at the same time, self-repairing method. He begins with four major classifications of different analyses that can be conducted with systematic analysis, but also hints indirectly that there are at least four directions by which to conduct the analysis. It remains open as to what other applications there might be. In doing so, this choice displays good methodological reasoning as methods can be used in various ways, sometimes even contrary to major directions if the research topic demands it. These four directions of analysis are elaborated in Jolkkonen's guide as singular concept analysis (one concept at a time), singular argument analysis, argumentation analysis (general not singular), and prerequisite analysis.[67]

[67] In addition to these four major analytical directions, I have written about the suggested fifth, analysis of functions, based on the works of Aino Hannula and myself in areas of earlier pedagogics and history of science, particularly the history of theories. These will be discussed in greater detail later. Jolkkonen 2007, 12–19.

1. Singular concept analysis

Jolkkonen opens the explanations of these different analyses by contemplating the historical and theological load placed on each concept by its use. These include words such as divine communication, inspiration, tradition, or word of God. In the opinion of Jolkkonen, every meaning of each idea requires a singular classification to be found and understood by systematic analysis. For this, he addresses the following topics:

> -How often are the concepts used (important ones frequently, circular ones are rarer)?
> -What is the weight of the idea within the text?
> -What kinds of concept pairings are in the text, and what is the relationship between them?
> -Is the idea being used in a normal or metaphorical way?
> -How are traditional theological and philosophical concepts employed?
> -How closely are the notions directed towards themselves?[68]

The unlocking of meaning behind the concepts starts with an understanding of the context, as this makes it possible to obtain a fuller picture of the ideas. Jolkkonen uses the example of scholastics to highlight the qualitative rise in theology by dedicating attention towards meanings and attempting to explain concepts unambiguously.

[68] Jolkkonen 2007, 13.

2. Singular argument analysis

Jolkkonen refers to the speech act theory of J. L Austin which contends that the use of language is not only descriptive, but also comprises actions that have effects. The analysis of singular arguments has, according to Jolkkonen, at least three meanings:

> 1. The argument has certain *content*. This is the locutionary act of the argument.
> 2. Arguments are used for a purpose; for example, to describe, ask, greet, argue, complain and so on. These are the illocutionary acts of the argument.
> 3. Arguments are also used to trigger specific effects in the receiving person such as strengthening faith, guiding towards goodness, elevating social cohesion, triggering feelings of empathy and judgement and so on. This is the perlocutionary act of the argument.

Jolkkonen continues with a similar list of what to consider when analysing singular arguments:

> -Is the argument explicit or implicit?
> -Is it the argument of the writer or a description of someone else's idea?
> -How strong is the argument? Is it, for example, polemic in relation to the arguments of someone else?
> -Does the writer limit his/her arguments to other divergent arguments?
> -Are the arguments describing generally accepted facts or the writer's special emphasis?

-How does the argument relate to classical theological and philosophical solutions?[69]

3. Analysis of argumentation

Jolkkonen builds this analysis by stating that argumentation analysis is built on concept analysis and argument analysis, and tries to deepen knowledge of these by concentrating on the reasoning that underpins them. He contends it is equally important to attend to singular and general assessments of the entire argument. For this analysis to succeed, the division of argument and explanation must be successful. In a broad sense, the argument is not only an argument itself, but also the entirety of the that which constitutes the following: 1) claim, 2) reasoning of the claim, 3) background assumptions. Also, the explanation has three parts: 1) interpretive, 2) explanatory, 3) background assumptions. For the argumentation analysis, Jolkkonen suggests the following questions:

-Are the claims in the text based on explicit or implicit arguments?
-How are the arguments in the text documented? Have they been documented at all?
-What kind of arguments does the writer employ?
-Are the arguments sound (coherent, factuality of premises)?
-Do singular arguments together form an inherently sound entire argument?[70]

[69] Jolkkonen 2007, 15.
[70] Jolkkonen 2007, 17.

4. Prerequisite analysis

When all other matters are taken into consideration when researching arguments and the basis of these, Jolkkonen notes the importance of prerequisites. He attempts to explain how - based on the knowledge of prerequisites - arguments (explicit and implicit) can be explained as soundly as possible. The question is on what fundaments the prerequisites are built. He asserts that numerous systematic theological studies try to identify a principle that structures the argument. This makes the entirety whole in terms of the logic of the subject. Jolkkonen highlights the following issues for this type of analysis:

> "-What is the relationship of the writer towards different theological and philosophical schools of thought?
> -What kind of supposition of reality does the writer have behind his/her writings. Is reality; for example, portrayed as spirit (idealism) or substance (materialism)?
> -What type of ontological position does the writer adopt (realism, antirealism, monism, dualism)?
> -What kind of epistemological prerequisites are embedded within the perspectives of the writer? According to the information they provide, can these be based on foundationalism, or is knowledge always conceptual (anti-foundationalism)? Furthermore, can belief be founded on knowledge at a fundamental level, or are belief and knowledge entirely different and incompatible (fideism)?
> -What type of impression of God is conveyed in the text?
> -What is the impression of the spiritual message of the text (as a doctrine, presence, history, or experience).

> -What kind of impression of humankind does the text presume?
> -How are the impressions displayed in the text related to classical fundamental theological questions (God doctrine, divine communication, Bible, history, tradition, reason, belief, concepts of theology and so on)?[71]

Jolkkonen continues that not all texts have a consistent fundamental logic or offer a philosophical explanation of the entirety of the text. If this is the case, it is more advisable to conduct argumentation analysis. Jolkkonen also conveys the idea of system-immanency (immanent) possessed by each source material. In general, when studying the specific materials of an author, his/her text or texts can form an immanent self-explaining world with its own logic. It can be the Bible or any monograph or other limited text corpus. Also, Jolkkonen employs the structural principle as a venue for explaining entire immanent text corpuses in terms of argumentative logic. When conducting research on the meaning of limited material, this logic can be found within the immanent understanding of thought behind the text; it does not simply refer to the text alone. Moreover, Jolkkonen contends that systematic analysis is often said to be system-immanent because the conceptual system is studied typically from "inside" following the rules of the text. Additionally, the goal is to form a structural principle that underpins a fundamental solution, perspectives, or interests which are central for the writer, and thus explain the details of the entire subject.[72]

Although Jolkkonen's approach is brief and all the examples are dedicated to theology, multiple systematic analysts have acquired

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[71] Jolkkonen 2007, 19.

[72] Jolkkonen 2007, 20–21.

basic ideas from his guide. The critique has also been made that systematic analysis needs development, as Ida Heikkilä explains:

> "In Finland in systematic theology, the understanding and handling of method has been thin for a long time in comparison with conceptual questions. Negative certainty that systematic theology does not have its own godly method, and has been strong, but any positive alternative has not been done clearly and comprehensively. Jari Jolkkonen's systematic analysis as a research method (2007) has retained its monopoly on dictating the method and quoting this clear but narrow guide from Batchelor thesis to dissertations has become standard. The baseless sentence 'this research uses systematic analysis as a method' can be found in almost every study, but the very rare sum of these can explain more broadly the magnitude of this method in choices of source materials, analysis of the sources, and for demonstration of results. The pressure for clear and meaningful estimation of method has arisen because of the co-operation of faculties and doctoral programs and, on the other hand, pressure by competition for funding: scientific research is more noteworthy when it can display a strong methodological foundation, in many cases defined by ideals of natural sciences."[73]

Heikkilä has not accused Jolkkonen of somehow monopolising systematic analysis in theology, even at a national level. She has instead voiced a concern over the fact that numerous studies are

[73] Heikkilä 2020, 68.

conducted in a more homogenous methodological manner despite the necessity for proper methodological vigour and borderless co-operation. This problem is reoccurring in every aspect of systematic efforts, no matter what the field of study. To enhance the skills of method in systematic analysis, a broader reading of method and methodological philosophy is required, as it is in any case when conducting appropriate research. In the summaries of the following papers, different fields of study are considered. As a solution for the aforementioned problem of Heikkilä, there is an open door to all other fields of studies where systematic analysis has been conducted, in some cases significantly and with broader scientific scope.[74]

[74] Heikkilä also indicated by comparison that both Jari Jolkkonen and Lukas Ohly (systematic theology in both cases) highlight the understanding of text by its own rules, as an inner world of the text, subjective and immanent in its form. This is an important detail for those interested on new developments in systematic theology in Germany. Heikkilä, 72.

Pedagogics and systematic analysis

The next paper on systematic analysis was written by Juhani Jussila, Kaisu Montonen, and Kari E. Nurmi in the field of education. Their 51-page chapter "Systematic analysis as a method for pedagogics" is a cooperative text which encompasses six chapters on the philosophical elements of systematic analysis, and thus comprises the most extensive general explanation of its methodological philosophy. Their paper offers a very broad heuristics of systematic analysis as a method. It also covers numerous methodological heuristic problems. As an aftermath of other multiple writings on systematic analysis, the only downside is practicality. The papers of Jolkkonen and Hannula have more to give in this respect, although none of the other papers has such a broad scope.

One perfect novelty of this paper on systematic analysis is the broad consideration of those who have, in one way or another, used systematic analytical thinking in their work on philosophy and science. The first chapters cover a wide range of examples from Aristoteles, Hegel, and Leibniz to Husserl, and Derrida, the latter two marking a critical point when a solely reconstructive perspective was ultimately challenged by deconstruction in Derrida's thinking, and as an earlier version in the 'destruction' evident in Husserl's thought. This highlights the promise and usability of systematic analysis, but also clarifies its limitations. In essence, systematic analysis can be employed to address almost any scientific problem, but how it is used always varies depending on the case. It is always vitally important to view methodological books and writings as general or specific suggestions on how to maintain the scientific criteria and methodological heuristics within research.[75]

[75] Jussila & Montonen & Nurmi 1992, 159, 162, 165.

With regard to scientific criteria, this paper opens the task of systematic analysis in the form of analytical tasks and the creation of a synthesis. It asserts that there is no general rule for making a synthesis, although it is always built on the combination of analyses. Analysis alone can only facilitate mental classification of the subject, content, meanings, and context, and partly influence the reasons for having or understanding prerequisites. The study is systematically analytical because of the creation of a sound synthesis which gathers and partitions the results of the analyses.[76]

Thus, the analytical work in the systematic analysis is conducted by gathering a systematic explanatory structure through explanations of meaning, context, and the part these single issues play in the whole system. Ultimately, every analysis is compiled within the synthesis in a way that illuminates the relationship between these pieces. Consequently, the synthesis builds through meanings and factual understanding, but also with a comprehension of the disorganisation and arguments that speak for and against it. Furthermore, writers highlight that because of how the synthesis is built, this kind of analysis requires a larger picture in the form of a systematic overview so that the study can truly be systematic analysis. This system is not always equivalent to systems theory or a rigid system but, in most cases, it is a system of thought. Logically arduous parts can be seen as nourishing parts for systematic analysis when striving to find analytical answers. It is also essential that the entirety of the analysis is limited in a sensible manner, thereby enabling it to be supported in a meaningful way by the chosen methodological philosophy to ensure the entire analysis has scientific integrity.[77]

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[76] Jussila & Montonen & Nurmi 1992, 158.

[77] Jussila & Montonen & Nurmi 1992, 158–161, 170–171.

The analysis can be conducted in a more limited form; for example, on human thoughts (thought system), organisation, or anything out of which a corpus can be made. The focus is typically on the meaning of certain topics, terms, or certain contexts created by a community, institution, or group. Another way of limiting the analysis is to share details of the categories or phases chronologically, or otherwise ensure the study has relevant limits. The analysis itself mostly comprises qualitative sorting, categorisation, and finding connectivity, meanings, and arguments, and understanding these as a whole.[78]

The different methodological philosophies mentioned earlier, such as hermeneutics and phenomenology, have given further insight into systematic analysis in terms of the intention of thoughts and formation of meanings. The main writers on these themes are Aristotle researcher Franz Brentanon, phenomenologist Edmund Husserl, and Martin Heidegger's thoughts as a deep systematic thinker. Moreover, the importance of this theme is central because it affects the phenomenological centre of a researcher who is methodologically renewing their intuition.[79]

In connection with this, the goal of systematic analysis is to explain the basic fundaments of the subject and the interaction among these. When the analysis has identified even minuscule reasons and influences, the task is to find general principles that can explain the phenomenon being studied. The study can be conducted immanently which means limiting it to within a certain text/corpus and leaving all the connectivities aside. The aim in both a broader and immanently conducted study is theoretically to seek to understand thoughts and systems of thought reasoned from the material, and to identify the central reasoning or philosophy

[78] Jussila & Montonen & Nurmi 1992, 196–197, 183–184, 197.

[79] Jussila & Montonen & Nurmi 1992, 167.

underpinning these. Systematic analysis is therefore not only the reflection of or reference to writing, but a deeper analysis of the inner world of the corpus material in terms of its logic, reasoning, concepts, and meaning.[80]

Furthermore, understanding, and thus critically examining source materials involves more than subjective views. The text and its context take precedence because the former is always created in a certain time, culture, history, and "by the minute" feelings and intellectual notions of its creator.[81]

The difference between content analysis and similar methods is that systematic analysis attempts to build a deeper understanding of principles and views which create the possibility of mastering and comparing thought systems that can be analysed from the content. Sometimes, it is necessary to create new meanings, words, or theories. This is a necessity when synthetically building the theoretical entirety (for example, when analysing theories or thoughts). At other times, it is important to focus on the influence and reasoning behind these in order to systematically explain the mechanisms of thoughts on the phenomena. If this is necessary, it is essential to categorise sources and to analyse meanings, to create a hypothesis of meanings, and to illuminate their backgrounds. Hence, systematic analysis tends to add more layers of heuristics to the study and create possible new reasonings. Studying the meanings behind these hypotheses increases understanding through greater heuristics surrounding the study, thereby explaining better what the text entails.[82]

The writers Jussila, Montonen, and Nurmi divide the systematic analysis into three main tasks:

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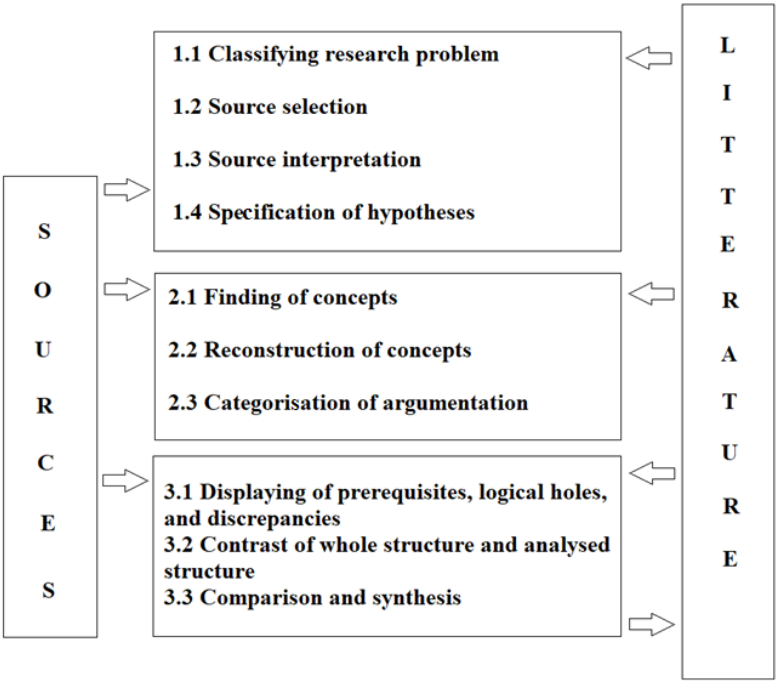
[80] Jussila & Montonen & Nurmi 1992, 171, 174, 198–200, 204.

[81] Jussila & Montonen & Nurmi 1992, 175.

[82] Jussila & Montonen & Nurmi 1992, 176, 184–187, 190.

1) Phase of understanding the problem and sources
2) Phase of analysis
3) Phase of explanation and use of analytical results

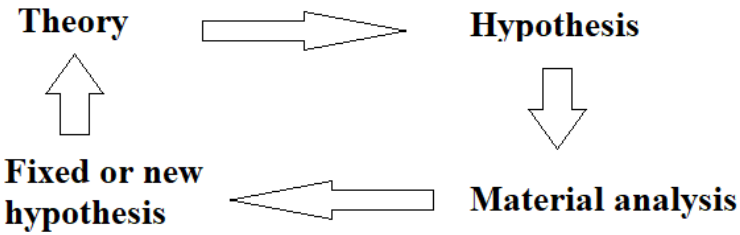
Jussila, Montonen and Nurmi's Figure 1. Phases of systematic analysis[83]


1.1 Classifying research problem
1.2 Source selection
1.3 Source interpretation
1.4 Specification of hypotheses
2.1 Finding of concepts
2.2 Reconstruction of concepts
2.3 Categorisation of argumentation
3.1 Displaying of prerequisites, logical holes, and discrepancies
3.2 Contrast of whole structure and analysed structure
3.3 Comparison and synthesis
SOURCES
LITTERATURE

[83] Jussila, Montonen and Nurmi 1992, 177–180.

In addition to these phases, analytical work is performed on the creation of hypotheses that guide the phases of systematic analysis. These can be depicted as follows:

Jussila, Montonen and Nurmi's Figure 2. Theory grounded text analysis[84]



Hypotheses are trialled by running this cycle as many times as necessary. It is vital to use theoretical parts of the source materials or support new hypotheses on the basis of interpretation. In both cases, this cycle is repeated until the hypothesis can be deemed properly functional; otherwise, as in many cases, it might prove to be trivial. It is also important to clarify the scientific philosophical foundations of the researcher so that the creation of reasons and processes can be judged more clearly.[85]

In addition to numerous details and explanations, Jussila, Montonen and Nurmi have remarked on how to review the quality of systematic analysis. Although this has basic elements of science as a method, its conduct cannot be reviewed in the same way as single method-based research. It is gathered and modified by the philosophy of science, views, analytical targets, goals, and field of

[84] Jussila & Montonen & Nurmi 1992, 189.
[85] Jussila & Montonen & Nurmi 1992, 189.

study related choices. Therefore, it is easier to consider systematic analysis as a mixture of analytical tools rather than a single method. Hence, the analysed subject and result of the synthesis is one of the key elements for reviewing the quality of systematic analysis research. This type of analysis, if made with an immanent focus, cannot be reviewed as a general theory or frame of reference due to its aforementioned limitations (I expand this topic when discussing the final paper on SAH-theory.) A properly conducted systematic analysis attempts to reach as near to the system of thought of the original source as possible. According to Jussila, Montonen, and Nurmi, to avoid critical subjective thinking flaws, the researcher needs to ensure the following:

-Solutions for starting point; theoretical views and choices of texts are clear.

-Methodological solutions, background hypotheses, principles of interpretation are displayed clearly. The research target is criticised and conceptualised so that the reader can understand the key thoughts and related details.

-Prepositions and interpretation heritages are not limiting the researcher's ideas; it is essential that new interpretations are possible, and that through comparison with old ones, new concepts can be conveyed clearly.

-Justifications of interpretations are controlled by reviewing interpretations within different parts of texts, therefore displaying similarly themed thoughts.

-In interpretations, initial ideas are not typically satisfactory. The goal is to find as many multi-layered formations as feasible while

identifying when certain concepts are used and how these have been supported.

-Displaying interpretation solutions that do not adhere to the researcher's own concepts

Following the holistically brilliant paper by Jussila, Montonen, and Nurmi, I will review more personally directed papers on the development of systematic analysis. Nurmi continued his contribution to systematic analysis through publication in 2004 which refined and clarified several aspects of the method and advanced further reading on different classical sources of systematic analysis and philosophies of science.

Later developments of Kari E. Nurmi – systematic text analysis

This later text of Nurmi is dedicated to research on intellectual, philosophical, and theoretical texts and the content of ideologies and worldviews within qualitative analysis. This method is defined by Nurmi as one based on immanent reconstruction which is handled systematically to understand the reasoning and concepts of texts, books, and corpus materials. It refers to the mixture of methods by which the meaning and structures of texts are studied with the purpose of clarifying the reasoning of the concepts and connectivities, central ideas, and the holistic view of the text.[86]

Systematic text analysis is applied in:

- **Philosophy and theology**: The study of earlier intellectual heritages, philosophies, theories or their parts, ideas and propositions, structures, and differing interpretations
- **Cultural studies**: such as folkloristics, literature studies, and film and art studies; these examine the cultural production and analysis of interpretative practices that belong to a culture.
- **Social studies and applied humanistic studies**: These engage in the theoretical assessment of existing theories and analysis of different discourses.

The fundamental basis of systematic text analysis is typically linguistics and semiotic studies as any study of interpretation is also the study of meaning. In Nurmi's opinion, because text analysis is

[86] Nurmi 2004, (subchapter on Application of systematic text analysis)

generally applied to the study of classics or what is perceived as classical text, most of this endeavour leans in the direction of philology and the study of language structures in linguistics.

According to the perspective of research questions systematic analysis can be divided into the following mutually supportive parts:[87]

- **Isagogics**: a study of the creation, appearance, genre, translation, and media variations of text
- **Exegetics**: a study of original social contexts and connected meanings within the context of a text
- **Interpretation history**: a study of chances of the use of words and interpretation, and the prerequisites and consequences of these changes within the text.
- **Hermeneutical study of** the text with present meanings

Nurmi notes that although these classifications are artificial in nature, they still remind the researcher to pose different questions to those that have been already asked. This can sometimes lead to a new source or secondary source materials.

In subsequent parts, Nurmi introduces the various paradigms of text analysis within four categories: hermeneutic-phenomenological, positivistic, critical and postmodern. These are introductory texts where basic explanations of these paradigms are expressed by linking them to classical materials.[88] These provide the basis for researchers to perceive different classical perspectives.

[87] Nurmi 2004, (chapter on Science foundation of text analysis)

[88] All quoted and notified philosophers and scientists can be found in this part. Nurmi 2004, part ‘Tekstianalyysin paradigmat’.

Nurmi also offers five pairs of opposing views.[89]

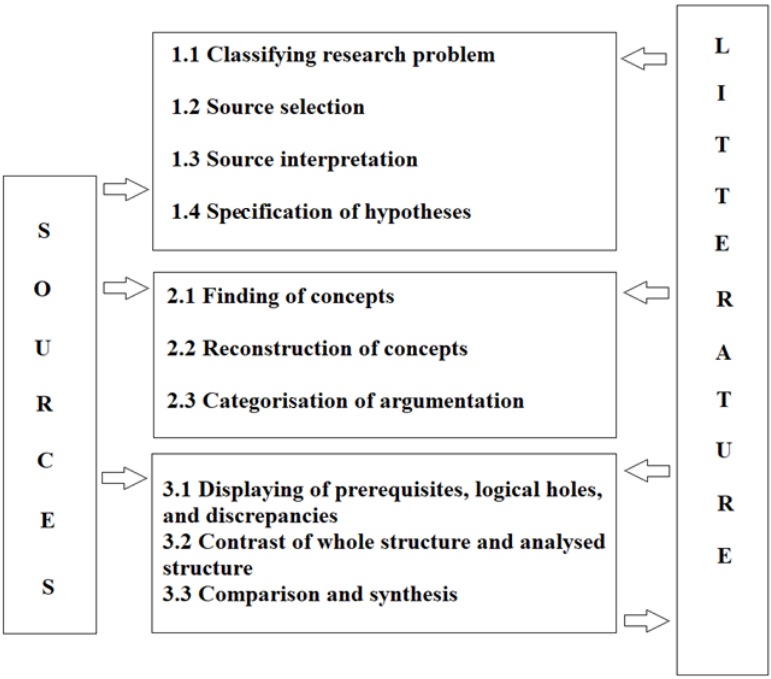
1. Immanent vs transcendental
   The analysis is immanent if the interpretations are limited to the internal language, concepts and context, and theoretical content. The analysis is transcendental if any outer logic from the corpus material is used within the analysis.
2. Reconstruction vs deconstruction
3. Categorising vs interpretation
4. Understanding vs critical
5. Inductive vs deductive

For research purposes, Nurmi has used the same formation here as he did in 1992, with the addition of subtitles in each part: 1) research problem and understanding sources, 2) analysis, 3) interpretation and use of analytical results.[90]

[89] These I have found useful in the development of SAH theory.

[90] Nurmi 2004 (chapter on Text analysis possibilities)

Jussila, Montonen and Nurmi's Figure 1. Phases of systematic analysis[91]


1.1 Classifying research problem
1.2 Source selection
1.3 Source interpretation
1.4 Specification of hypotheses
2.1 Finding of concepts
2.2 Reconstruction of concepts
2.3 Categorisation of argumentation
3.1 Displaying of prerequisites, logical holes, and discrepancies
3.2 Contrast of whole structure and analysed structure
3.3 Comparison and synthesis
SOURCES
LITTERATURE

[91] Jussila, Montonen and Nurmi 1992, 177–180.

Immanent reconstruction

As explained previously, immanent systematic analysis works on problems of thought and philosophy in a personal or literary sense. The problem can be structural, argumentation related, conceptual, or contextual. It can also be applied as a secondary method to maintain the structure in research. Nurmi notes that this has been accomplished numerous times in the field of history, and sometimes in psychological or social studies.

The task of immanent reconstruction is to ask questions posed by earlier studies and initial knowledge provided by source materials. Systematic analysis is therefore iterational and typically based on heavy reading before, during, and after the synthesis of analytical solutions. During these repeated iterations of verifying answers for asked questions every problem opens in a way that eventually permits solutions. There is no definite order of analysis and, according to Nurmi, those using this method need to return to earlier phases during research.[92]

To form a synthesis, the analysis should preferably commence with broader and open questions. Moreover, it is necessary that the research is critical regarding the limitations of the understanding of conceptual theory created on the subject. In principle, the start of every analysis in earlier theories is based on systematic analysis. The research topic is also limited by the subject, timeline, and original text. Furthermore, hypotheses are created on the basis of earlier research, and advanced further if insufficient earlier research material is available on the topic. On this occasion, the researcher encounters additional difficulties in finding the right questions. The function of these questions is twofold; they help to clarify the

[92] Nurmi 2004 (Chapter on Immanent reconstruction)

research process, and enable a researcher to be aware of what they have learned.

According to Nurmi, choices of the texts used for analysis are governed by the questions the researcher is required to answer[93]:

- What is the whole of the texts, the text corpus where the texts being analysed belong?
- What are the limitations of texts; where does the analysed text begin and end?
- What is the core of the text corpus that concentrates on the issue researched?
- What alternative versions and their parts are being analysed?

The research problem needs to be defined as a clear question and hypothesis that can, in principle, be answered with chosen materials. The questions must be non-trivial which means they should be in a form such that the researcher's own and others' hypotheses can be falsified. The hypothesis can be founded on an evident requirement that has to be checked through analysis. Otherwise, research traditions and an increasing understanding of them within a subject raise the possibility of an interpretation hypothesis. Yet it is important not to drown in hypotheses because text analysis hypotheses differ from experimental ones which do not automatically give the same results as earlier attempts. In text analysis, interpretation hypotheses are based on the same sources, but it is essential that the researcher is critical, exact, open, and logically able to detect mistakes in the hypotheses. Sometimes, researchers need to take another road, forget everything, and restart with a new hypothesis and read everything as novel, unknown material. It is

[93] Nurmi 2004 (subchapter on Choice of texts)

easier if the researcher chooses methods of analysis they have not previously used.

Nurmi's thought and premise on the execution of textual analysis is that the thought system within the text is based on ideas and relationships between them that create connective propositions. Thus, the text that is being analysed or a group of texts is a display of these propositions as a theoretical and descriptive thought system. The textual analysis therefore involves the identification of concepts, reconstruction of arguments, differentiating argumentation from the entirety of corpus, the checking of prerequisites, and addressing holes in argumentation and contradictions.

Research practices of systematic analysis in early pedagogics

Aino Hannula wrote about the practice of systematic analysis in 2007. She chose the methodological background primarily due to the writings of Jussila, Montonen, and Nurmi in 1992, but has used this general philosophical view in a very pragmatic manner. The focus of Hannula's paper was to explain the methodological choices for her research on Paulo Freire's pedagogical classics. This explanation of methodological practice includes numerous phases and various descriptions of backgrounds to Freire's writings. These parts have been cut from this summary to ensure Hannula's practical choices on how to conduct systematic analysis as a method are clear.

Notably, Hannula's pragmatic approach has paved a pathway for many who are beginning the practice of systematic analysis, but are not yet familiar with the plethora of philosophies of sciences and ideas surrounding the use of this method. Consequently, Hannula has

realised most pragmatic tools from the philosophy of systematic analysis, making her application of systematic analysis exemplary for the study of immanent corpus materials.

Hannula starts with positioning the method by stating that the idea is to understand the inner world of the text, the philosophy, and the thoughts of the original writer. Hannula has also provided a comparative definition of the focus of the method. As tools for studying the content of the text, in discourse analysis, the focus is on language while content analysis focuses on the categorisation of the text which by structural understanding may create quantitative data sets of the original texts. In systematic analysis, this task is to understand how the inner world of the corpus material extends to the meanings, content, contexts, and inner logic of the creator of the text. It is therefore a study of hidden meanings and the smallest details to form a synthesis of how philosophy works.[94]

To achieve this task, Hannula, like Jussila, Montonen, and Nurmi, uses a divide between analyses and synthesis. Analysis in systematic analysis is the practice of classifying thought systems from the text and synthesising them to gather the thought systems as a whole. (To clarify, it is not a study of systems in the systems science sense, but a qualitative approach focused more on organic logic in terms of analysis.) Hannula highlights the coinciding relation between analysis and synthesis by stating that within analysis, the task involves classifying earlier premises whereas a synthesis is based on this knowledge. Hannula describes this part as a process:[95]

[94] Hannula 2008, 113–116.

[95] Hannula 2008, 116–117.

> "Analysis is a way of thought journey in a world created by the concept or theory system and the task is to raise, in perspective of thought, structures to lift essential thoughts to understand original reasoning as a whole."[96]

Hannula has here broadened the scope of reasoning between analysis and synthesis, rendering it manageable by bridging them together, indicating that the relationship between analysis and synthesis is bidirectional. In terms of the openness of systematic analysis, this view also helps to elucidate how synthesis is built in a practical sense.

With regard to analysis, Hannula uses the open reasoning[97] of philosophy of science similar to Jussila, Montonen, and Nurmi and a later paper by Nurmi in 2004. If systematic consideration is performed in terms of analysis and synthesis for various research questions, different methodological or philosophies of science can be applied. Hannula mentions similar views than Jussila, Montonen, and Nurmi, as different choices of perspectives; reconstruction, deconstruction, structural, inductive, and a deductive and philosophical perspective as Hannula has used can be hermeneutics and phenomenological or any other relevant philosophy of science. The choice of these selections of the researcher is left for the reader because different subject areas and questions always require a reconsideration of methodological tools.

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[96] Hannula 2008, 117.

[97] Hannula 2008, 111, 123.

Systematic analysis hermeneutic theory – from immanent to beyond

As expressed in earlier papers, systematic analysis has been described mostly as an immanent application. This gives the method excellent criteria for source usage because it limits the scope of articles and bachelor's and master's theses. It has also been employed as a help tool or as a primary technique in research and numerous dissertations. Nevertheless, when immanent has been insufficient for the scope of the research, there has been little progress without needing to apply greater thought to the scientific criteria, broader source logic, influences, or as in my case, study of theoretical heritages. These topics, and many other immanent analyses, does not provide generalized scientific criteria that could be reused elsewhere. To be able to conduct research with more source variations while retaining the reliability and validity of systematic analysis as a method, I developed systematic analysis hermeneutical theory (SAH-theory).

The foundation of this theory owes a considerable amount of effort to Jussila, Montonen, and Nurmi. Most matters are being considered at a fundamental level, as they themselves wrote in 1992.[98] The major difference culminated in the following division about which Nurmi wrote in 2004:

[98] Jussila, Montonen, and Nurmi 1992.

> "Immanent vs transcendental
> The analysis is immanent if the interpretations are limited to the language of specific text, concepts and context and theory content. The analysis is transcendental if any outer logic from the corpus material is used within analysis."[99]

My task in terms of theory was to build criteria and phases (to borrow an expression from Nurmi) for transcendental analysis, and to make it as scientifically viable as immanent systematic analysis has been, despite its broader scope and strong limiting factors. This choice has, however, added a limitation to this type of analysis. Systematic analysis in the transcendental sense can be conducted without restrictions in fields of study that conduct qualitative research. Nevertheless, in comparison with the immanent form of this method, the greatest limitation is its use. The broader use of source materials considerably increases the difficulties of forming a synthesis from all the analyses based on different sources. This is not impossible, and with work phases it is manageable, but the transcendental version of systematic analysis in any form will always require more work than an immanent version for numerous reasons. Analytically equal conduct between source materials needs an extensive study of sources, as conducted in the immanent version of this method. This means that the workload is substantially greater when comparing different corpus units, and this adds additional difficulties that require workable phases to be recognised each time. For example, if we compare different theories in terms of functionality or influence, the task in both cases is not only to understand the workings of these theories and their developmental

[99] (Transcendental philosophy) Nurmi 2004.
https://metodix.fi/2014/05/19/nurmi-systemaattinen-tekstianalyysi/

history, but also categorisations and the weight of arguments and influences that led to each of these theories becoming prominent in the field of study. Furthermore, a theory is not always used in the same way that it is built. Hence, any comparison between different text corpuses (required for any transcendental systematic analysis) must consider these and other limitations, depending on the research question. The principal flaw would be to compare something that is not comparable, which adds to the difficulty of source material choices and categorisation of different source corpuses in comparison with immanent systematic analysis.

Nevertheless, many studies need all or part of the transcendental logic of systematic analysis to be able to explain external issues within the subject. As Ida Heikkilä has mentioned (earlier quote on the theme of Jolkkonen)[100] it is necessary for systematic analysis to develop. To cover such a requirement in cases of interdisciplinary research or for any other transcendental systematic analysis, I continued mostly from the point of view that Jussila, Montonen, and Nurmi had formulated. Additionally, I received immense help from Vesa Suominen who built applications for my theory in the field of information studies to make it more accessible.

The theory begins with the perspective of Jolkkonen who named four categories of analytical targets.[101] To illustrate, the theory is explained in terms of the fifth suggested category, the functions of theories. The starting premise is similar to systematic analysis in general, while in this case, functions, concepts, and arguments need to be understood within theoretical examples to understand the total functionality of a certain theory. The same applies to all other theories when making a comparison. For the analysis, I chose the division of two components for the philosophy of understanding, and

[100] Heikkilä 2020, 68.

[101] Jolkkonen 2007, 12–20.

for limiting and finding problems and solutions from different corpuses. These two components, hermeneutic understanding and deconstruction, are used in the analysis as a polaristic pair of viewpoints to argue each fundamental point.

Otherwise, the analysis and building of synthesis based on the transcendental form of analysis is divided into five work phases. These phases are not necessarily always performed in this order, as openness is a necessity for building a synthesis. The phases are as follows:

Work phases of SAH-theory[102]

1. Balance between hermeneutic understanding and deconstruction
2. Logic of analysis – logical confirmation
3. Validity of synthesis of analysis
4. Comparability of analyses
5. Exactness of synthesis, repeatability of synthesis

Because hermeneutics and deconstructions are not only different perspectives in science, but also fundamentally very different ideas of the philosophy of science, their relationship is not synthetical. The purpose in using these viewpoints is to comprehend, but at the same time to argue and find limitations with deconstruction against the understanding carried by the hermeneutical view. This polaristic approach nurtures new multiple viewpoints and keeps analysis more scientifically limited. Furthermore, it is essential that analyses are conducted in a way that permits the building of synthesis; therefore, the main consideration is always to keep the analysis comparable

[102] Tervashonka, Suominen 2020, 57.

between perspectives, or between those analyses that will be linked together with the same criteria in synthesis.[103]

The second phase[104] aims to retain a clear logic of conduct. Since there is no particular word that defines the qualitative logic of research, I coined the term *logical confirmation* to explain the relationship of source analysis within qualitative studies. This entails two basic research tasks, confirmation of facts from sources and explanation of the logic by which this act is conducted. There is also confirmation theory by Bayes,[105] but this is meant for natural sciences, and is partly applicable to quantitative studies. Given that the theory is designed mostly for qualitative research, the term "logical confirmation" serves to highlight the tools of the trade. This phase, although very basics of science, has seminal importance for systematic analysis. To obtain the equal quality in analyses and therefore permitting the building of synthesis, the analysis that are parts of it cannot have uneven relationship with another. This can be achieved by considering how analyses were conducted in terms of analytical logic, consideration of source limits and qualities, same categorization if used. Logical confirmation is not only a general viewpoint of qualitative science making, but also provides a clear logic of discovery for qualitative analysis such that the general idea of the research could be repeated by anyone with the same source materials. This, of course, is an ideal goal that many kinds of research are not able to meet at each point of the text, but the quality of general reasoning in the systematic analysis is better when connectivity of sources can be logically confirmed.

The third phase is mentioned in case it is necessary to construct a synthesis based on one or a group of analyses before a final synthesis

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[103] Tervashonka, Suominen 2020, 57–59.

[104] Tervashonka, Suominen 2020, 60–61, 65.

[105] Howson & Urbach 2006, 45, 51, 91–93.

is made. This is also required when a final general synthesis of the entire subject is being prepared. The phase involves a consideration of the validity of each analysis in the synthesis, and how synthesis, as a form of unified analysis, works equally well with the reasoning of logical confirmation. Therefore, this phase partly involves checking the soundness of the logical confirmation of each analysis and critically attempting to break built explanations to ensure their logical integrity.[106]

The integrity of analysis is important for the fourth phase because it lays the basis upon which logical comparisons can be established within synthesis. For instance, when conducting research on different theories, it is necessary to apply comparisons within a similar subject. If these theories are not equal in influence, spread, scope, clarity of explanation, usability, or any other differences that could affect a comparative analysis, these differences need to be considered. In many cases, the categorisation of researched entities will require rebalancing, or the entire comparison is invalid because the targets are not initially comparable. These reasons restart the entire process of considering whether theories or other entities can be compared and become part of the synthesis of analyses. Phases three and four are important for understanding of limitations of argumentation and data, and as such are vitally important in clarifying the basis of the interpretation of the subject. This leaves at least three forms of qualitative analysis proofs (not to be confused with mathematical proofs).[107]

[106] Tervashonka, Suominen 2020, 61–62.

Straight/immediate source proof
Analysis of the subject → deduction conclusion

Synthesis proof
Analysis of the subject → synthesis → qualitative conclusion proof

Broad synthesis proof
Analyses of subject → syntheses → whole general synthesis → qualitative multilateral synthesis proof[108]

The first of these is the basic form of single analyses that can already be gathered as a deductive conclusion. Several cases of quantitative analysis are conducted in this way in basic form. The fundamental form of systematic analysis requires the building of a synthesis from a unifying analysis (but not stacking them together like layers of cake). Proper synthesis is always a uniquely built explanation based on the components provided by the analyses. For SAH-theory synthesis proof, a multilateral synthesis is more typically needed. This means that multiple syntheses are generated within the subject. Typically, this concerns books or very lengthy articles, as each synthesis requires a consistent basis of explanations which require more work and pages. For example, interdisciplinary subjects, sometimes in a more holistic form, need this kind of broad proof work.[109]

The fifth and final phase in SAH-theory is to ensure that the synthesis proof is repeated step by step to test whether it is clear to readers, and that the logic of execution of the final synthesis has a sound basis. As Nurmi has written in an earlier paper, some parts of the synthesis, or the entire synthesis, might not work; therefore, the

[108] Tervashonka, Suominen 2020, 63.
[109] Tervashonka, Suominen 2020, 62–64.

researcher has to recommence the entire process with either alternative methodological tools, a different philosophy of science, or, as Nurmi has mentioned, from a new perspective and reading the data as new.[110] At this phase, the importance is laid on the repeatability of the logic by which the synthesis is built. It concludes the analytical result of the work, but also explains how the synthesis was formed based upon logical confirmation. This is the confirmation of repeatability of argumentation and interpretations made within analyses.[111]

In terms of openness of the systematic analysis, SAH-theory can combine an increase in scientific criteria for conducting the method with larger amounts of corpus materials. To avoid losing the openness of the method by adding excessive procedurality, Phase 1 in SAH theory is analytically very open. The next three phases ensure that the analysis is conducted in a manner that permits valid and combined analysis for the creation of the synthesis in Phase 5. This latter phase remains more open as the creation of a synthesis is always an organic intuitive process. Hence, through this choice, an increasing number of corpus materials can be analysed without sacrificing the openness of the method.

[110] Nurmi 2004.

[111] Tervashonka, Suominen 2020, 64–65.

Comparison and meta-analysis

Thus far, I have briefly summarised each paper in terms of methodological logic, execution, and, in some cases, scientific limitations. Because these materials have been created with a similar idea, but for different user groups, a divergence in explanations emerges. Nevertheless, if they are similarly focused, and with a similar philosophical background, a comparison can be made. This will be open in that I will not be concentrating on every limitation of the applicability of each paper.

The focus of this analysis is to manage major differences between these papers to identify general limitations, and through an understanding of the purpose of each systematic analysis paper, I form a view on how to develop systematic analysis further as a method. There are innumerable choices and perspectives for further development. However, there are limits on how fruitful these efforts might be; hence, a new methodological perspective is required. If we consider method to be a practical instrumental tool or philosophy of science, in both cases it will have its applicability, limitations, and hopefully logical reasoning. With this in mind, I first perform a comparison of these papers, discuss the variety and limitations of the contents and based on such a comparison, form views as to what could be improved further.

For the comparison, it is essential to be aware of the differing uses of systematic analysis. Not all are on an “equal footing” in terms of scope, usability, or accessibility. Yet these versions are connected to the same philosophy of systematic analysis; therefore, it is not only acceptable to compare them, but also to generate useful ideas for further development. This is the only reason why a comparison has been made. Furthermore, it becomes possible to identify what kind of projects to prefer over others. Because of the

openness of systematic analysis, the problems are not to execute the method itself, but earlier choices as to what perspectives are adopted, what measures are employed in case of analyses, and what criteria should be met whenever this open method is used.

These questions and others are always asked prior to each use of this general method.

The target of this analysis is therefore to classify selected papers in terms of applicability, usability, and scientific limitations. After an overview of the comparison, the secondary task is to discuss resulting views on how to develop systematic analysis, thus formulating different strategies for developing the method. My purpose has been to develop a systematic analysis for interdisciplinary problems that need not only a substantial number of bridges between differing corpus materials, but also helpful stages for categorising source analyses and creating sustainable applicability between analyses. This is extremely important in being able to build a sound synthesis rather than unique ‘non-applicable to anything’ mixed results.

In the following comparison table, several categories are employed to better illustrate the differences and functionality of each paper as a view on systematic analysis.

Author	Jolkkonen	Jussila, Montonen and Nurmi	Nurmi	Hannula	Tervashonka
Title	Systemati c analysis	'Systematic analysis as method for pedagogics'	Systematic text analysis	Systematic text analysis	SAH theory
Publ. Year	2007	1992	2014	2007	2020
Target audience	Students	Researchers and dissertations	Researchers and dissertations	Researchers and dissertations	Researchers
Source consideration	Typically, one corpus material	One corpus, mentions plural possibility	One corpus material	One corpus material	Multiple corpuses
Source limitations	Immanent, limits to a specific corpus	Potentially Open	Open, but suggested to be limited	Categories of source importance	Categories of source importance
Disciplines	Theology	All qualitative	All qualitative	All qualitative	All qualitative
Application philosophy	Classificat ion	Open immanent philosophical classification	Textual open classification	Textual immanent classification	Open transcendental classification philosophy
Application limitations	Classificat ion questions	Single corpus requiring synthesis	Single corpus requiring synthesis	Single corpus requiring synthesis	Multiple corpuses requiring synthesis
'Example' field of study	Theology	Pedagogics	Not expressed	Early pedagogics	Theory history & information studies

General work phases	No phases	10 phases	10 phases	Analysis and synthesis	Five phases
Definition of systematic analysis	As a mixture of methods	Philosophical method	A mixture of methods guided by systematic philosophy	Philosophical method	Interdisciplinary method
Method limitation	System immanent	Immanent general systematic analysis	Immanent reconstruction	Immanent reconstruction	Multiple text corpuses
Heuristics of the method	Classification tool	Philosophical systematic tool	Philosophical systematic tool	Method for systematic analysis and synthesis	Multilateral systematic method on multiple corpuses

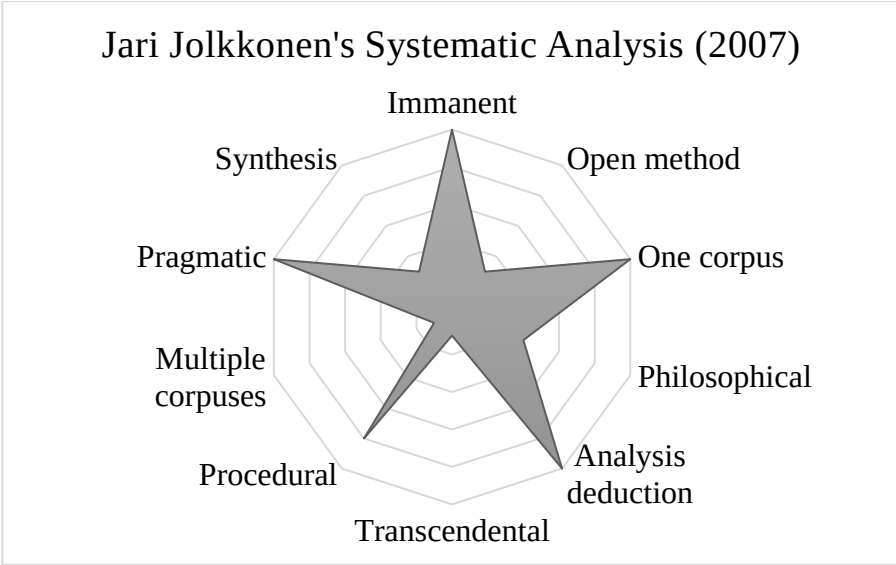
As indicated, my paper and Jolkkonen's are opposite in many categories, while the other three papers have more cohesion because of their similar origins. The table includes all the classifications from the original papers (summarised previously) on the methodologically important issues. Method limitation, source limitations, and heuristics of the method have commonalities, but these take different perspectives depending on the case. I prefer to use heuristics of method with respect to the whole "environment" of method use and, depending on all other limitations, it will appear in a designed or undesigned form. The question of heuristics in the method therefore concerns its purpose. These are not only what method makers will write about, but also constitute the question of applicability and scientific limitation of the method as a functional tool.

Method limitation is specifically what classifies as a limit to the method. For the systematic analysis version, the greatest limiting factor is the source material, as the purpose is to understand through

certain corpus material the ideal world of the subject and how it functions. Even though SAH-theory is intended for multiple corpuses, this choice also causes limitations for the method in SAH-theory. In the case of the other four papers immanent source limit of single corpus and immanent logic, has been used. In Jolkkonen's paper, he notably calls systematic analysis system-immanent.[112] Jolkkonen also uses the term "system" in describing systematic analysis as operating from inside of the subject. The aim is to understand the original logic of the source maker, as well as to explain the gathering principle underpinning the entire logic of the source. Thus, according to Jolkkonen, it is with this reasoning that systematic analysis is system-immanent, in that it is inside the logical explanation of a system. Other writers have used descriptions such as thought world, idea world, or in my case thinking system to capture the inner world of the corpus in terms of its logic.

For more specific differences in these systematic analysis papers, the following comparison charts illustrate the qualitative functional differences in each case and identify the interests covered. This also reveals differences in scientific use, limitations, applicability, and usability depending on the nature of the research question. Naturally, estimates of the charts are qualitative approximations. Each category in the charts has an opposing viewpoint at the opposite axis, and the cover field indicates the holistic general form of the systematic analysis in each case. The charts depict the derived values, functionalities, and limitations of each paper on systematic analysis to illustrate and classify their major methodological differences.

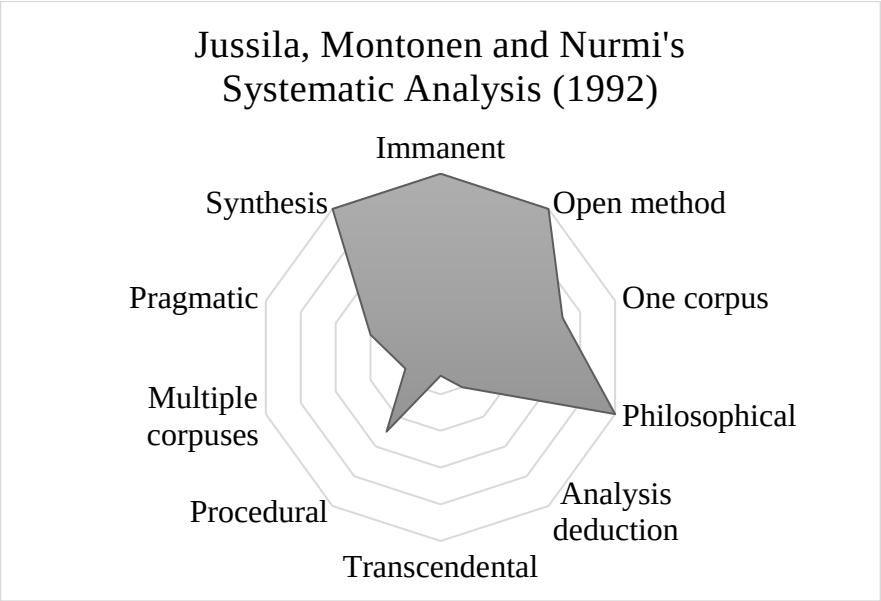
[112] Jolkkonen 2007, 21.

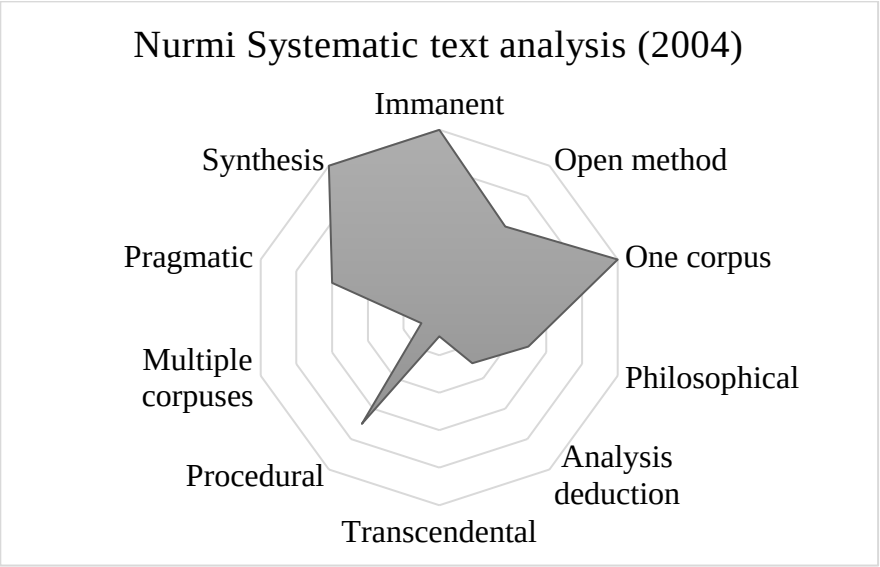


This is why systematic analysis is typically perceived as a broader methodological philosophy rather than a method (or as Jolkkonen has put it, a mixture of analytical methods which I would add fall under one systematic philosophy). The major difficulty is that systematic analysis does not have any philosophy from where everything is led. Only the systematic nature of this type of research is methodologically similar. However, it has the greatest advantage of systematic analysis as a philosophical methodological tool because it may be modified in multiple ways, and its methodological integrity can be maintained by recalling the theoretical phases and views which in combination ensure that the methodological application has been systematic. However, in general use, it is essential to apply the systematic analysis in a more elementary manner, as suggested in Jolkkonen’s guide (created mostly for pupils and thesis works). Nevertheless, with regard to science as a

systematic endeavour, no study that dedicates time to this systematic philosophy will fare worse than without it.

Therefore, the problem is not how deeply philosophical or general texts are being used, but the lack of order by which people are introduced to this subject in various fields of study. This necessity for open and broad consideration can be found in Jussila, Montonen, and Nurmi (1992), but carries an additional cost. While keeping the method open, the choice has been to limit it by maintaining the immanent limitation of one corpus as a preferred research strategy. The perfectly justifiable reason is that the applicability of the method covers more cases, whereas for article or even dissertation use, and research for a period of less than one year, there is less need to consider multiple corpuses at the same time. With this reasoning, I created the SAH theory in 2020 to develop this aspect of choice further. It has many times less the number of the cases where theory can be applied, but at the same time it covers the highly necessary cases of studies where multiple corpuses are required for analysis and synthesis building. In the case of immanent analysis, Kari E. Nurmi developed this (1992) broad philosophical view in a more practical manner in 2004.


Jussila, Montonen and Nurmi's
Systematic Analysis (1992)
Immanent
Open method
One corpus
Philosophical
Analysis
deduction
Transcendental
Procedural
Multiple
corpuses
Pragmatic
Synthesis


Nurmi Systematic text analysis (2004)
Immanent
Open method
One corpus
Philosophical
Analysis
deduction
Transcendental
Procedural
Multiple
corpuses
Pragmatic
Synthesis

In contrast to his earlier text, Nurmi has adopted a more educational position. Nevertheless, true to the spirit of the interdisciplinary nature of systematic analysis, Nurmi leaves the use and applications of the method open, and maybe also in the level of detail on the interpretation of the method. This open form is the key point of Nurmi's expressed analysis which highlights the greatest difficulty of systematic analysis, but additionally the promise of discovery. In both texts, Nurmi's message is to consider the criteria of corpus materials, and form questions for analyses that strike at the core of meaning by asking new questions, usually indirectly helped by systematic analysis. With Nurmi's recommendations, it is evident that users of the method ought to undertake a proper effort to acquire information. The necessity for information to fuel appropriate investigation with systematic analysis not only refers to information on key issues of the corpus material, but also involves understanding any corpus material. Even with an immanent limitation for corpus, extensive reading is required to understand parts and relationships of corpus material. This is a typical problem for any research topic but, within systematic analysis, this demand is highlighted. Without a sound and exact analysis, the creation synthesis will not be reliable or nearly as valid as it should be. However, as Nurmi has highlighted, sometimes analysis needs to be restarted with different methodological considerations, or maybe a different research question.[113] Despite this rather uncertain starting point for any researcher, systematic analysis creates almost self-repairing perspectives because of the use of the method. The relationship between analysis and synthesis-making forces a consideration, not only of singular analysis, but also connectivities, prerequisites, meanings, categories, interpretations, and the demand for sound logic drive analysis increasingly towards a clearer solution. This is attained

[113] Nurmi 2004, (chapter on Parsing research problem)

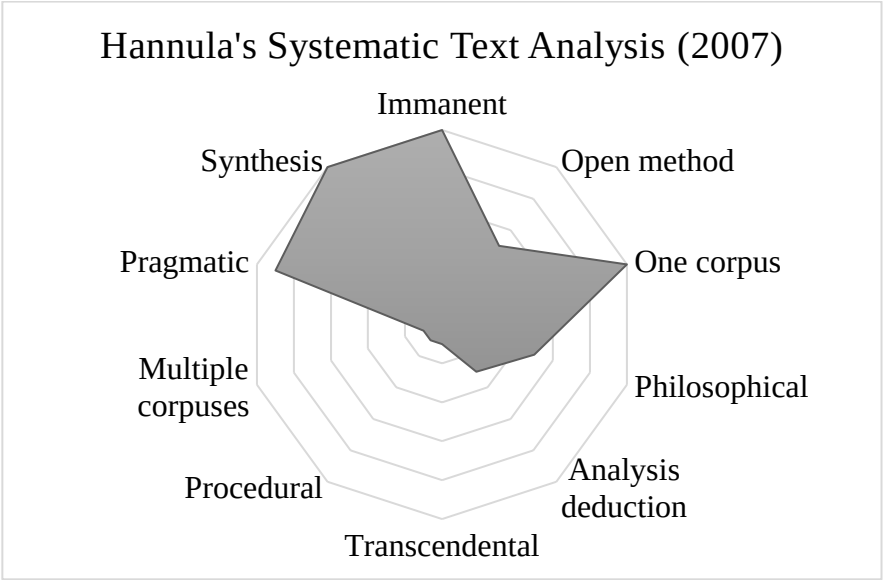
through the iterative process of amplifying every key argument and meaning from the most minor detail to the main abstractions without losing the logic in between. As Nurmi asserts, the writer should make clear content so that analytical iterations do not build up on the conducted text and mix readers with uneven layers of different versions of the analysis iterations. Therefore, most of the methodological work of systematic analysis will not appear on the final version of research paper.[114]

Moreover, iterations are an extremely important part of building a proficient systematic analysis on any subject. It is not expressed as strongly as it should be within Nurmi's Metodix paper, but the basic purpose is to eradicate mistakes, and build a scientifically stronger joint analysis, and thus a better synthesis. Nevertheless, the greatest problem is not the iteration but finding sound criteria each time for thematical problems that need to be seen and addressed within the analysis. Each research question or new corpus material always introduces new methodological challenges. In the case of method, systematic analysis tends to be a robust solution for any kind of qualitative problem or, in some cases, even quantitative problems. However, it is not always self-evident what methodological leaning or philosophy of science might help with each problem. From student research ranging from theses to dissertations, basic systematic analysis will suffice, but when addressing broader questions, the inner workings and logic can begin to break down within the analysis. If multiple stages of synthesis are required, the problems multiply. Within this text, there is little evidence of a solution to this problem, other than recommencing in the worst case. I admit sometimes that it is the best call that can be made with a

[114] Nurmi 2004, (subchapter on Total structure and parallelising research subject)

research project but, on the other hand, people want some form of trust factor that this method will give tangible help for the project.

Hannula's article on the practice of systematic analysis in 2007 might have had some impact on Nurmi's formulation of more practical considerations in 2004. This is in terms of the general direction, rather than a very substantial change in the logic of the method. Nevertheless, Hannula offered highly pragmatic descriptions and views on the use of systematic analysis as a method through a valuable example presented in her study of Paulo Freire's pedagogical classics. The principal novelty of her paper lies in the application of the broader philosophies and reasonings of open systematic analysis from Jussila, Montonen, and Nurmi (1992), giving better accessible to a wider audience.

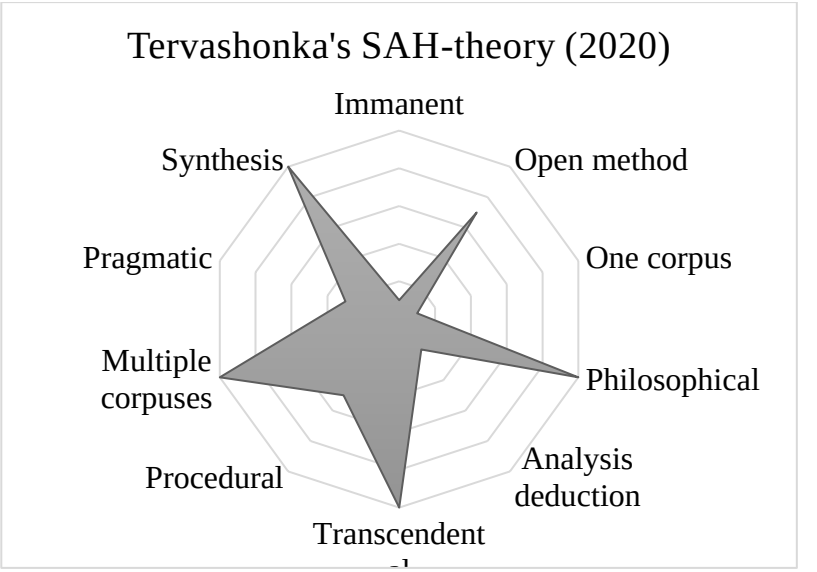


Hannula's article is one of the best starting points for obtaining awareness of systematic analysis as a method because it provides a substantial background upon which to work. Although in many studies, only one corpus is considered, this approach is enough. The problem with these is not broad criteria fines, but the difficulty of perceiving the inner world of the original writer and formulating accessible reasoning that readers can follow while conducting immanent analysis. The challenge is therefore not only of understanding, but also how to clarify something that sometimes cannot be explained systematically. Some of the reasonings or values might be inherently flawed, or form deformed or broken "systems" which can only be described superficially in a general sense. In essence, Hannula has given indirect solutions for this by not advancing with the philosophy of science and paying attention to the minute details of the source materials. Because I have conducted my theory and writing in a totally different manner, I can still say that Hannula's perspective is more valid than my SAH-theory in most of the research. This validity is derived from pragmatism. As explained previously, SAH-theory considers vast amounts of corpuses, with the cost of a higher demand for reading; hence, everything used must be analysed similarly and with criteria which helps form a synthesis based on these multiple corpus materials. In many cases, it is not the most fruitful position in research, but for interdisciplinary research, it has a substantial amount to offer.

As the reader may observe, not only in the level of argumentation, but also in terms of functionality, SAH-theory is the opposite of Jolkkonen's version of systematic analysis. The starting point is very similar, but the functionality and considerations are totally opposite as can be seen from the illustrative charts and in some ways in the comparison table. This comparison is the greatest divide among the whole cohort of papers, mainly because the instrumentality of the method is considered differently, whereas in

terms of the immanent classification of a single corpus, Jolkkonen's model works perfectly. Analysis of the Bible in the area of theology is indeed an excellent method. As Heikkilä has stated, Jolkkonen has to some degree achieved almost a monopoly on this question in Finnish theological methodology if a systematic analysis is used. It provides an extremely reliable choice for those who not only want to think about the meaning of the message or its structure, but also to follow how these ideas are formed in a holistic sense.

The problem of immanent choice is its limitation. To some extent, it is always unique, depending on how the corpus was created. The wider applicability of the research is sold on the promise of conducting a study that can be handled more manageably. This is the main benefit of choosing an immanent systematic analysis. The problem arises when we would like systematic analysis to be more applicable to a subject, maybe even interdisciplinary. It is extremely difficult to conduct immanent research on a topic that would yield highly applicable interdisciplinary results. The problem is similar when using discourse analysis. Immanent systematic analysis is highly reliable, but this involves a limitation in comparison to methods that can be used for interdisciplinary research questions.



Although SAH-theory is designed to be a method not only for the study of multiple corpuses, but also for interdisciplinary needs, it can to some extent be used for multilateral synthesis building where a final synthesis is formed from multiple minor syntheses. Conducting this kind of research will demand more time, and even articles based on this will only be miscellaneous parts of a wider research project. In SAH-theory, the scientific hardship is the opposite of immanent theories of systematic analysis. The problem is not the applicability or openness of the method, but forming and maintaining the same criteria in each analysis so that synthesis can be reliably and rigorously conducted with multiple corpus materials. This raises the risk on reliability with the benefit of higher applicability. This choice is not however quid pro quo between immanent and transcendental or one corpus and multiple ones because most studies will not require such broad considerations in terms of methodology. SAH-

theory can be applied in interdisciplinary projects, the creation of systems theory, or as a connectivity philosophy between researchers working on the same project with backgrounds in multiple areas of science. Therefore, I would not say that the audience and the number of users can in any way be thought of as equal. Moreover, the development of scientific criteria for different applications of SAH-theory will need considerably more development than the creation of theory. In every use of systematic analysis, it is necessary that the implementation of the method is considered to be new. Many criteria work in similar ways, but every problem or new corpus material will require a new set of considerations, pertaining to the logic of organising and categorising evidence.

For Jussila, Montonen, and Nurmi, the question in 1992 was also the philosophical methodological choice. Depending on the research questions and from what material, different philosophies of science can and have been applied for the use of systematic analysis.[115] Similarly, Nurmi continued the theme by forming polarised pairings of different philosophies of science to demonstrate in an elementary way how these can be applied in systematic analysis.[116] In these papers, systematic analysis is expressed in a very open method. The cost of it is mentioned in Nurmi's later article where he states that sometimes the analysis has to be conducted again with a new perspective, as the data would be new. In numerous other studies, this can happen sometimes, but the difficulty in method, as open methods as systematic analysis is, that the risk is considerably higher. From a risk management perspective, there is a potential that the applicability of systematic analysis as a method will only be conducted on "definite cases" despite its high applicability because of its openness. This higher risk from the perspective of openness

[115] Jussila & Montonen & Nurmi 1992.

[116] Nurmi 2004. (Chapter on Text analysis possibilities)

and criteria for scientific reliability can be justified by other strengths which systematic analysis possesses as a method, but this also creates problems regarding its applicability. Systematic analysis is a good choice if a researcher wants to achieve mastery of the subject area, not only in terms of knowledge but also by understanding the inner workings and logic of the subject. Nevertheless, at the same time, it is an extremely time-consuming method, and requires considerable effort regarding the use of memory,[117] intuition,[118] and abstraction.[119] These demands can be read very openly from the uses of the method and from theoretical papers on systematic analysis. This results in systematic analysis being highly demanding, but also leads to a higher-yielding method in terms of reliable results.

If we consider the comparison table as a whole and compare the charts of each paper, several notable points can be extracted. This selection of papers now covers immanent single corpus material studies and, with SAH-theory, the more extreme necessity for a higher number of corpuses, but there is currently no middle ground for these papers. In cases of 2–4 corpuses, there is no theory for executing the research with systematic analysis in current applications. This reduces the question to the status of an either-or question without a middle ground for several corpus sources. This leaves considerable room for the development of middle ground in terms of source usage.

Similarly, the balance between openness of the method and procedurality are two highly polaristic features in the method. On each occasion, stages, rules, guidelines, and other elements that need to be followed within methodological procedurality increase with the cost of openness. Systematic analysis is, and should be, a very open

[117] Hannula 2008, 113.

[118] Tervashonka, Suominen 2020, 59.

[119] Jussila & Montonen & Nurmi 1992, 158–159.

method, and in most papers, it has been conducted as such. The only differences were in Jolkkonen's paper where procedurality was a feature for making correct classification, whilst being alert to the centrally important logic the original text might have. In SAH-theory, adding more stages into the study to ensure broader applicability was achieved at the expense of the total openness offered in a more philosophical form by Jussila, Montonen, and Nurmi in 1992. The paper displays all manner of applicability in the question of differing philosophies of science, and demonstrates through the historical build-up of the systematic analysis how different philosophies and ideas have affected the method. This will leave any developer of systematic analysis the tricky question of balancing openness and procedurality. In both cases, there are differing applications. Openness is needed for any qualitative research and the use of intuition. Procedurality, however, ensures more reliability in the use of the method when conducting research with a larger amount of complexity. In hindsight, machine learning of systematic analysis could begin from this procedural point of view.

Conclusion with respect to further development

One result of the comparison and meta-analysis of systematic analysis papers is that readers can now choose with more accuracy the philosophy and views on systematic analysis required for their projects or use a combination of views. Systematic analysis as an open method has immense tolerance for modular approaches in methodology. The limitation of this functionality is that basic rules of systematic analysis ought to be prioritised in order to use the method correctly. If modular hierarchy is used erroneously, the method is not exactly systematic analysis, or is instead used as a secondary help tool.

As a conclusion regarding applicability, Jolkkonen's paper offers the fundamentally simplest approach to the method, and is a good starting point for beginners. In addition to this broader philosophical consideration, Hannula's article offers a pragmatic focus and examples from his study of Paulo Freire's classics. Nurmi's Metodix article (2004) offers broader selections of philosophies of science and helpful views on what they can or have been used for. This article requires a further reading of the philosophy of science to be able to put it to proper use and scale in a scientific frame of reference. Similarly, an earlier book chapter by Jussila, Montonen, and Nurmi (1992) presents the broader philosophical heritage of the method, different detailed phases, and a substantial structure upon which to build the analysis. This makes their article essential for a broader understanding of systematic analysis, and thus it has also much to offer for more advanced uses of the method. In comparison, SAH-theory offers more particular methodological criteria for the use of multiple corpuses for interdisciplinary studies or projects needing multiple synthesis. Alternatively, the work phases of SAH-theory can be used as an addition to the 10 phases in Nurmi's model

of systematic analysis to meet broader source consideration needs. If the study concerns singular corpus material, the use of SAH-theory is not recommended.

Despite the differences in these papers, there remain generally applicable problems. As most of the systematic analysis is built on the basic concept of analysis and synthesis, I return to the beginning of the reasoning of this method. How do we obtain from analysis classifying or content to the synthesis? The relationship between them is highly organic in nature, and differs almost every time with the logic of each case. Do we have any remedy for this or guidelines on how synthesis is eventually created? I agree with Nurmi that there is, and probably cannot be, any more than very general rules for the creation of synthesis because the creation process is always unique based on the content, and this applies in both immanent and transcendental applications of systematic analysis. Nevertheless. the question remains as to how to arrange the process of synthesis creation, and how to develop a reliable synthesis. Currently, none of the papers has an answer to this question, including my own.

The question of reliability is always important for the development and scope of applicability of any method. If we increase the complexity of the task for which we use systematic analysis, it is essential that a more unified analysis logic is maintained to conduct the multiple syntheses needed in more complex studies. Similarly, the difficulties in applying a very open method with higher work demands need to be justified, at least with qualitative studies in terms of results. For complicated research questions in interdisciplinary research, systematic analysis has much to offer, either as a main method or in an applied form as suggested in SAH-theory. Systematic analysis cannot be conducted with “less work”. It is a deep level analysis, and the demands it places on the user are clear and time-consuming. Consequently, the only way to develop the method is to consider the general results of using

systematic analysis. Because systematic analysis is a very open method, the applicability of the method can be seen as a key feature that it offers. Today, it offers the promise of solving complicated problems, but its development requires more theoretical papers to expand its applicability. Within this study, there have been several factors identified in relation to this, but the balance between open method and a procedural, less intuitive method limits the potential for development. With more complex research questions, this polaristic relation typically goes in the direction of procedurality at the expense of openness for the sake of reliability. However, retaining the openness of systematic analysis as a philosophical method serves numerous purposes in qualitative research where intuition plays a bigger role within synthesis creation. For this reason, SAH-theory has offered a partial solution for balance between openness and procedurality when managing more complex research questions. In using the term “partial”, I want to highlight that SAH-theory currently covers the fewest number of studies as a method out of all five papers. However, with the similar methodological strategy this balancing factor offers, SAH-theory can be re-used in other kinds of theories of systematic analysis to fulfil the increased need for reliability when addressing complex research questions without losing the intuitive openness of the method to procedurality.

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Systematic analysis is a qualitative interdisciplinary method that uses its procedurality and openness to gain systematic results for further use in science. This book displays perspectives from multiple fields of study and generalized papers on practice, guidelines and theory of the method.

Authors combined multifaceted perspectives showcase accumulated information on systematic analysis and its applications, with perspectives ranging from philosophy to history, systems science, systematic theology, pedagogics, and information science. Thusly, this book displays decades of methodological progress on systematic analysis and gathers different perspectives under one title for further convenience for the practitioners and developers of this method.

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